



# BIPAC-5100/5100W (Wireless) ADSL Router

## **CLI Command Reference Manual**

**Disclaimer:** This document is subject to change without notice and information was correct at time of writing. Some features outlined in this manual do not apply.

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## 1 Revision History

Date	Release	Description
April 8, 2003	1.0	File creation
July 8, 2003	1.1	Release version after review
October 6, 2003	1.2	Add IP Alias and IP Policy Routing CI commands

## 2 References

- [1] ADSL Router Product Brief, version 0.2”, October 2002
- [2] ITU-T Recommendation G.992.1 “Asymmetrical Digital Subscriber Line (ADSL) Transceivers”
- [3] ITU-T Recommendation G.994.1 “Handshake Procedures for Digital Subscriber Line (DSL) Transceivers”
- [4] ITU-T Recommendation G.997.1 “Physical Layer Management for Digital Subscriber Line (DSL) Transceivers”
- [5] ITU-T Recommendation I.361: “B-ISDN ATM Layer Specification”.
- [6] ITU-T Recommendation I.363.5 (1996): “B-ISDN ATM Adaptation Layer Specification: Type 5 AAL”.
- [7] ITU-T Recommendation I.432.5: “B-ISDN User-Network Interface – Physical Layer Specification: 25600 kbit/s Operation”.
- [8] ITU-T Recommendation I.610 (1998): “B-ISDN Operation and Maintenance Principles and Functions Abstract”.
- [9] Internet Engineering Task Force RFC 2684, “Multiprotocol Encapsulation over ATM Adaptation Layer 5”, D. Grossman, J. Heinanen, September 1999

### 3 Abbreviations

AAL	ATM Adaptation Layer
ADSL	Asymmetric Digital Subscriber Line
AN-IWF	Access Network Interworking Function
ATM	Asynchronous Transfer Mode
ATU-C	ADSL Terminal Unit – Central
ATU-R	ADSL Terminal Unit – Remote
BLES	Broadband Loop Emulation Service
B-NT	Broadband Network Termination
CLASS	Custom Local Area Signaling Service
CO	Central Office
CO-IWF	Central Office Interworking Function
CPE	Customer Premises Equipment
CP-IWF	Customer Premises Interworking Function
DSL	Digital Subscriber Line
DSLAM	DSL Access Multiplexer
DTMF	Dual-Tone Multifrequency
E&M	Ear and Mouth
FXO	Foreign Exchange Office
FXS	Foreign Exchange Station
ISDN	Integrated Services Digital Network
ISP	Internet Service Provider
ITU-T	International Telecommunication Union - Telecommunication Standardization Sector
IWF	Interworking Function
LAN	Local Area Network
MIB	Management Information Base
NT	Network Termination
NTBBA	Network Termination Broadband Access
PBX	Private Branch Exchange
POTS	Plain Old Telephony Service
PPP	Point-to-Point Protocol
PSTN	Public Switched Telephone Network
PVC	Permanent Virtual Circuit
QoS	Quality of Service
SNMP	Simple Network Management Protocol
VAD	Voice Activity Detection
VC	Virtual Circuit
WAN	Wide Area Network
VMOA	Voice and Multimedia over ATM

## 4 General Description

This reference manual contains the descriptions of commands on Command Interpreter (CI) interface built-in on ADSL Router CPE chipset solution. The Product developed by Technologies is the evaluation board using ADSL Router CPE solution chipset to implement an ADSL WLAN Router/Modem. It provides high-speed Internet access for small/medium businesses through ADSL connection. It lowers the cost of data transmission service delivery for the small business subscribers.

The Product provides one 10/100BASE-T Ethernet port, one USB 1.1 port, and one PCMCIA WLAN card slot for connecting to user's local network. In addition, the Product provides bridging and IP routing to support a wide range of applications for high-speed Internet access. The Product will be interoperable with major vendors DSLAM solutions.

On the management interface, Wireless ASL Router provides a console interface which can be accessed through terminal emulator program on RS-232 serial interface or through telnet protocol on LAN/WAN physical interfaces. Wireless ASL Router also provides the web page configuration & management tool through HTTP protocol. In this manual, we describe the command interface on the console port in details.

## 5 CI Command Reference

### 1.1 Command Interpreter Mode

The CI Commands can be divided into four different categories:

- ♦ System Related Commands
- ♦ TCP/IP Protocol Commands
- ♦ Ether Debug Commands
- ♦ WAN Debug Commands

#### 1.1.1. Command Syntax and General User Interface

CI has the following command syntax:

**command** *<iface | device>* **subcommand** [*param*]

**command subcommand** [*param*]

**command ? | help**

**command subcommand ? | help**

General user interface:

1	help	Shows the following commands and all major (sub)commands
2	exit	Use this command to exit from the CI Command environment

---

#### 1.1.2. System Related Commands

*<ch-name>* : enet0, mpoa00

Sys			
	adjtime		
	callhist	disp	display call history
		remove	remove entry from call history
	countrycode		<i>&lt;country code&gt;</i> set country code
	cpu	disp	display CPU usage status
	date		display the system date
	domainme		display the domain name
	edit	<i>&lt;filename&gt;</i>	edit a text file
	extraphnum		
		add	<i>&lt;set 1-3&gt;</i> <i>&lt;1st num&gt;</i> <i>&lt;2nd num&gt;</i> add extra outgoing phone numbers
		disp	display outgoing phone numbers
		node	set extra phone number to node n

		remove		remove extra outgoing phone number
		reset		system reset extra flag and mask
	feature			display feature bit
	hostname			display system hostname
	log			
		clear		clear log error
		disp		display log error
		online	[on off]	turn on/off error log online display
	socket			display socket status
	stdio		[second]	set terminal timeout value
	syslog			
		facility		choose what kind of facility to be used
		mode		display syslog mode; enable/disable
		server		Identify the UNIX syslog server
		type		display syslog type
	time			display timer cell
	trcdisp	parse		monitor packets
	trcl			
		call		display call event
		clear		clear trace
		disp		display trace log
		level	[#]	set trace level of trace log #:1-10
		online	[on off]	set on/off trace log online
		switch	[on off]	set system trace log
		type	<bitmap>	set trace type of trace log
	trcp			
		chann	<name> [none incoming outgoing bothway]	<name>=enet0,mpoa00 set packet trace direction for a given channel
		create	<entry> <size>	create packet trace buffer
		destroy		packet trace related commands
		disp		display packet trace
		switch	[on off]	turn on/off the packet trace
		udp	[sw addr port]	send packet trace to other system
.	.	brief	.	display packet content briefly
.	.	parse	[[begin_idx], end_idx]	parse packet content

	version			display RAS code and driver version
	view		<filename>	view a text file
	wdog			
		switch	[on/off]	set on/off wdog
		cnt	<value>	display watchdog counts value: 0-34463
	romreset			
	ddns	debug	<level>	enable/disable ddns service
		display	<iface name>	display ddns information
		logout	<iface name>	restart ddns
		restart	<iface name>	logout ddns
	atsh			display debug information and hardware configuration
	xmodemmode		[crc checksum]	
	filter			

### 1.1.3. TCP/IP Protocol Commands

<hostid> format : xxx.xxx.xxx.xxx (ip Address)

<ether addr> format : xx:xx:xx:xx:xx:xx

<iface> : enif0, wanif0

<gw> : gateway ip address

ip	address			display host ip address
	alias			Setting ip alias feature
	aliasdis			
	arp	status		Display arp table
		status		display ip arp status
	dhcp <iface name>			set dhcp configuration
		client	release	release DHCP client IP
			renew	renew DHCP client IP
		status		display iface DHCP information iface-name: enif1, enif0
	dns			
		query		
		stats	[disp clear]	display or clear dns statistics
	httpd			
	icmp			
		status		display icmp statistic counter

		discovery	<iface name> [on/off]	turn on/off icmp router discovery response
	ifconfig			display ifconfig
	ping		<hostid>	ping remote host
	route			
		add	<dest addr>[/<bits>] <gateway> [<metric>]	add route
		addprivate		add private route
		addiface		
		drop	<host address> [/bits]	drop a route
		status		display routing table
	routep	help		display the ip policy routing on-line help
		policy		display policy routing list
		create	<policy no> <name>	create a policy routing
		delete	<policy no>	delete a policy routing
		rule	<policy no>	display rule in a policy routing
		set		set a rule in a policy routing
		apply	[lan wan] <lan interface wan interface>	apply policy routing to lan or wan interface
		cancel	[lan wan] <lan interface wan interface>	cancel a policy routing from lan or wan interface
	status			display ip statistic counters
	udp	status		dump UDP statistics and control blocks
	rip			
	tcp			
		status		display TCP statistic counters
	tftp			
	xparent		<join> <iface1>[<iface2>]	join iface2 to iface1 group
			<break>	break iface to leave ipxparent group
	tredir			
	igmp	debug		set igmp debug level
		forwardall	[on/off]	turn on/off igmp forward to all interfaces flag
		querier	[on/off]	turn on/off igmp stop query flag
		iface		
			<iface> group tm <timeout>	set igmp group timeout
			<iface> interval <interval>	set igmp query interval
			<iface> join <group>	join a group on iface



			<iface> leave <group>	leave a group on iface
			<iface> query	send query on iface
			<iface> rsptime [time]	set igmp response time
			<iface> start	turn on of igmp on iface
			<iface> stop	turn off of igmp on iface
			<iface> ttl <threshold>	set ttl threshold
			<iface> v1compat [on off]	turn on/off v1compat on iface
		robustness	<num>	set igmp robustness variable
		status		dump igmp status
	pr			

lan	index		<lan no>	Set lan interface
	active		<yes no>	Active the lan interface or not
	ipaddr		<ipaddr> <netmask>	Set ip address and network mask to lan interface
	rip		<none in out both> <rip1 rip2b rip2m>	Set RIP to lan interface
	display			Display lan interface information
	clear			Clear lan interface information
	save			Save lan interface information

#### 1.1.4. Bridge Commands

<b>bridge</b>				
	cnt	disp		display bridge route counter
		clear		clear bridge route counter
	stat	disp		display bridge route packet counter
		clear		clear bridge route packet counter

#### 1.1.5. Ether Debug Commands

<ch-name> : enet0, mpoa00

<b>ether</b>				
	config			display Ethernet dirver configuration information
	driver			
		cnt	disp <ch-name>	display ether driver counters

		status	<ch-name>	ch-name: enet0, enet1
		config		
	version			

### 1.1.6. USB Commands

<ch-name> : enet0, mpoa00

<b>usb</b>				
	version			display usb support version
	address			display the usb device address
	config			display the usb configuration
	cnt			
		disp		display the usb endpoint counter
		clear		clear the usb endpoint counter
	debug			enable or disable the debug message
	reset			reset the USB connection

Note: USB related commands only be supported in USB model.

### 1.1.7. Show Commands

<ch-name> : enet0, mpoa00

<b>show</b>				
	wan			
		help		show the help contents
		node		show the status of wan in specific remote node
		adsl		show the configuration and setting that related to the adsl
	lan			show the lan configuration status
	community			show the community/SNMP configuration status
	channel			
		disp		show the channel status, configuration and counter
		clear		show the channel status, configuration and clear the counter
	all			show all information about the system

### 1.1.8. Set Commands

<ch-name> : enet0, mpoa00

<b>set</b>				
	cpe			set the configuration related to the sytem
		hostname		Set the system hostname
		message		Set the router cpe message

		iproute		switch the cpe router in ip mode (on/off)
		bridge		switch the cpe router in bridge mode (on/off)
	wan			
		help		Display the help contents
		node		Set wan remote node configuration
		clear		Clear or delete a remote node
		enable		Enable a specific remote node
		disable		Disable a specific remote node
		encap		Set remote node's encapsulation
		mux		Set remote node's multiplexing
		vpi		Set remote node's vpi value
		vci		Set remote node's vci value
		wanip		Set remote node's wan ip (static/dynamic)
		remoteip		Set wan remote ip
		bridge		Set remote node to bridge mode
		iproute		Set remote node to ip route mode
		sua		Set wan sua (on/off)
		rip		Set wan rip mode
		multicast		Set wan multicast mode
		ppp		Set ppp configuration
		save		Save wan configuration setting
		exit		Save wan configuration setting
		adsl		Set the configuration and setting that related to the adsl
	lan			
		ipaddr		set lan IP address
		rip		set RIP mode
		multicast		set lan multicast mode
		dhcp		set lan dhcp feature
		relayipaddr		set lan relay IP address
		dhcpcpool		set lan ip dhcp and pool value
		dhcpleasetime		set lan dhcp lease time
		dhcpcdns		set dns on dhcp feature
	community			set the router community configuration
	baudrate			set the router's baudrate
	reboot			reset the system

### 1.1.9. WAN on-line command for analysis

wan adsl chandata	check ADSL channel status

wan adsl close	close ADSL line
wan adsl coding	display ADSL line coding
wan adsl defbitmap	check ADSL defect bit map table
wan adsl open	open ADSL line
wan adsl opencmd gdmr	set ADSL operation mode at G.DMT
wan adsl opencmd glite	set ADSL operation mode at G.Lite
wan adsl opencmd multimode	set ADSL operation mode at multimode
wan adsl opencmd t1.413	set ADSL operation mode at ANSI T1.413 Issue 2
wan adsl openmode	check ADSL sync up mode
wan adsl reset	reset ADSL line connection
wan adsl status	check ADSL line status
wan adsl version	show adsl ANSI T1.413 version number
wan adsl vendorid	show adsl ANS T1.413 vendor id
wan adsl utopia	show adsl UTOPIA interface information
wan adsl nearituid	show adsl G.DMT/G.Lite near-end ITU vendor id
wan adsl farituid	show adsl G.DMT/G.Lite far-end ITU vendor id
wan adsl cellcnt	show adsl UTOPIA cell counters
wan adsl defectcheck	set adsl defect check turn on/off
wan adsl txgain	set adsl transmission gain value
wan adsl targetnoise	set adsl target noise margin
wan adsl txfilter	set adsl transmission filter
wan adsl setrvid	set near-end vendor id
wan adsl txtones	set adsl transmission start/stop tone number
wan adsl snroffset	set adsl SNR margin offset
wan adsl errorsecond	set/show adsl error seconds information
wan adsl diag	show adsl diagnostic information
wan adsl watchdog	set adsl watch dog turn on/off
wan adsl fwversion	show adsl firmware version number
wan adsl uptime	show adsl uptime
wan hwsar clear	clear SAR statistic information
wan hwsar disp	display SAR statistic information
wan hwsar sendoam	send ATM OAM cell
wan adsl perfdata	analyze line performance on ADSL
wan adsl linedata far	show far end ADSL line/noise status
wan adsl linedata near	show near end ADSL line/noise status

#### 1.1.10. WLAN command for analysis

wlan essid	set the name of network
wlan chid	set the channel configuration
wlan display	Show the wlan configuration settings
wlan load	Load the previous saved configuration
wlan save	Save the configuration
wlan clear	Clear the current settings to zero

wlan filter	Activate the filter set
wlan debug	Turn on / off the debug error message
wlan version	Show the wlan firmware version
wlan reset	Reset the wlan system
wlan association	Show the current list of clients join the service
wlan scan	Scan the available channel on the networks
wlan channel	Turn on / off wlan data TX/RX

Note: WLAN related commands only be supported in WLAN model.

## 6 Command Listing

### 1.1 *sys adjtime*

---

**Description** There is no Real Time Chip (RTC) in the router, so there is a software mechanism to set the time manually or get the current time and date from an external server when you turn on your Router. So you can enter the time manually but each time the system is booted, the time and date will be reset to 2000/01/01 00:00:00.

**Command Syntax** `sys adjtime yyyy/mm/dd`

**Output field description**

## 1.2 *sys callhist display*

---

<b>Description</b>	Use this command to display information about past incoming and outgoing calls.
--------------------	---

### 1.3 *sys callhist remove*

---

**Description** Use this command to remove information about past incoming and outgoing calls.

**Command Syntax** *sys callhist remove <index>*

**Parameters**

Name	Description
index	Index number



## 1.4 *sys countrycode*

---

**Description** In voice communications, the 1,2 or 3-digit number that precedes the national terminal number in the network user address (for public networks). Use this command to show and set the country code according to each local code.

*sys countrycode [countrycode]*

### **Command Syntax**

#### **Parameters**

Country	Country Code
Austria	233
Australia	244
Belgium	248
Czech Republic	246
Denmark	252
Finland	240
Germany	237
Greece	247
Holland	253
Hong Kong	242
Hungary	229
Japan	234
Malaysia	241
New Zealand	243
North America	255
Norway	245
Poland	231
Singapore	241
Slovakia	228
South Africa	254
Sweden	250
Switzerland	251
United Kingdom	249

Field	Description
Country code ()	shows the defined country code

### **Output field description**

sec ticks

## 1.6 *sys date*

---

**Description** Use this description to show the current date

**Command Syntax** *sys date [year/month/date]*

**Parameters**

Name	Description
Year	shows current system year
Month	shows current system month
Date	shows current system date

Current date is Thu 1970/01/01

**Output field description**

Field	Description
1970/01/01	Current system date is Jan 1, 1970

## 1.7 *sys domainname*

---

**Description** The unique name that identifies an internet site. Domain names always have two more parts, separated by dots. The part of the left is the most specific, and the part on the right is the most general. Use this command to display the domain name of the system.

*sys domainname*

### **Command Syntax**

Domain name : xxxxxxxx

### **Output field description**

Field	Description
xxxxxxx	The system domain name

## 1.8 sys edit

---

**Description** Use this command to edit and setup the configuration file autoexec.net that runs as the system started. The autoexec.net file contains the command that user can configure and wish to execute when the system started.

*sys edit autoexec.net*

### Command Syntax

#### Parameters

Command	Description
q(uit)	close the editor without saving
x(save & exit)	close the editor after saving
i(nsert after)	insert a line command
d(elete)	delete a certain command line
r(eplace)	replace a certain command line
n(ext)	view next command line

#### Output field description

Edit cmd : q(uit) X(save &exit) i(insert after) d(elete) r(eplace) n(next)  
command line  
command line  
command line  
,  
,  
EOF

Field	Description
Command line	CI command
EOF	End Of File, press q to exit

## 1.9 *sys extraphnum add*

---

**Description** Use this command to add extra outcalling phone numbers into your ATU-R.

**Command Syntax** *sys extraphnum add <set 1-3> <1<sup>st</sup> ph.num> [2<sup>nd</sup> ph.num]*

**Parameters**

Name	Description
<set 1-3>	Number set (max.3)
1 <sup>st</sup> ph.num	Fisrt phone number
2 <sup>nd</sup> ph.num	Second phone number

### 1.10 *sys extraphnum display*

---

**Description** Use this command to display extra outcalling phone numbers into your ATU-R.

**Command Syntax** *sys extraphnum display*

**Output field description** Extra Outcalling Phone Numbers  
Node : 256 Flag : 1

<0>

<1>

,

<5>

Field	Description
256	Remote Node
1	Flag
<0> .. <5>	No of set

### 1.11 *sys extraphnum node*

---

**Description**      Use this command to set all extend phone numbers to remote node <num>

**Command Syntax**      *sys extraphnum node <num>*

**Parameters**

Name	Description
<num>	Specify the node number



## 1.12 *sys extraphnum remove*

---

**Description** Use this command to remove extra outcalling phone numbers of a certain set from your ATU-R.

**Command Syntax** *sys extraphnum remove <set 1-3>*

**Parameters**

Name	Description
<set 1-3>	Specify number of set that wish to remove

### 1.13 *sys extraphnum reset*

---

<b>Description</b>	Use this command to reset all extra phone numbers and node.
--------------------	---

<b>Command Syntax</b>	<i>sys extraphnum reset</i>
-----------------------	-----------------------------

## 1.14 *sys feature*

---

**Description** Use this command to display router's Feature-Bit Information

**Command Syntax** *sys feature*

**Output field description** IPX : yes  
IP ONLY : no  
AUI : no  
AB ADAPTER : no  
IDSL ONLY : no  
IDSL : no  
INTERNAL HUB : no

Field	Description
IPX	IPX information
IP Only	IP only information
AUI	AUI connector information
AB Adapter	
IDSL Only	
IDSL	
Internal Hub	

## 1.15 *sys hostname*

---

**Description** Use this command display the system hostname

**Command Syntax** *sys hostname*

**Output field description** XXXXXXXX

Field	Description
XXXXXXXX	Router's hostname

## 1.16 *sys log clear*

---

<b>Description</b>	The router would record any errors happened in the system with extra information. Use this command to clear or delete the error logs recorded in the system
--------------------	---

<b>Command Syntax</b>	<i>sys log clear</i>
-----------------------	----------------------

### Description

*sys log disp*

## Command Syntax

```
0 Thu Jan 1 00:00:49 1970 PPO6 WARN MPOA Link Down
1 Thu Jan 1 00:02:23 1970 PPO6 WARN MPOA Link Up
```

### Output field description

9 Thu Jan 1 01:03:45 1970 PPO6 WARN MPOA Link Down  
Clear Error Log (y/n) :

Field	Description
0,1,2,3,...	Error Logs Line numbers
Date	Error Logs date and time
Status	Warning or Information
Log	System Log (connection or jobs)
Clear	Ask whether user wish to clear the error log

## 1.18 *sys log online*

---

**Description** Use this command to display or set error log online display switch

**Command Syntax** *sys log online [0|1]*

**Parameters**

Name	Description
0	Switch off the errorlog online
1	Switch on the errorlog online

**Output field description**

```
sys> sys log online
errorlog online: off
sys> sys log online 1
sys> sys log online
errorlog online: on
```

1.19 sys socket

Description	Use this command to display system socket information				
Command Syntax	sys socket				
Outoput field description	sys>sys socket				
	S#	Type	PCB	Remote Sock.	Owner
	8192	TCP	6969ac		1b11cc PP0b
	8193	TCP	696ac0		1b129c PP0d
	8194	Raw IP	6c85a0		1b1130 PP09
	8195	UDP	0		1b05d0 PSSV
	8196	UDP	6c87dc		1b15a8 PP0f
	8197	TCP	696bd4		1b1234 PP0c



## 1.20 *sys stdio*

---

**Description** The system automatically log out if idle for five minutes (default setting). Use this command to set the system idle timeout in minutes.

*sys stdio [minutes]*

**Command Syntax**

**Parameters**

Name	Description
[minutes]	Input idle timeout

Current Stdio Timeout = X minutes

**Output field description**

Field	Description
X minutes	X = system idle timeout

## 1.21 *sys syslog facility*

---

**Description** Use this command to enter log facility that allows you to log the message into different files in the server. There are seven different local options. Please refer to your UNIX manual for more detail.

*sys syslog facility <facility number>*

**Command Syntax**

**Parameters**

Name	Description
facility number	<1~7> local logging options

## 1.22 sys syslog mode

---

**Description** Use this command to enable/disable syslog facility

**Command Syntax** `sys syslog mode [y|n]`  
`sys syslog mode [1|0]`

**Parameters**

Name	Description
[y n]	y (enable) ; n (disable) the syslog
[1 0]	same as above 1 (enable) ; 0 (disable)the syslog

### 1.23 sys syslog server

---

**Syslog Description**

The router uses the UNIX syslog facility to log the CDR (Call Detail Record) and system messages to a syslog server.

**Description**

Use this command to set syslog server IP address in the syslog facility to log CDR

*sys syslog server [destination ip]*

**Command Syntax****Parameters**

Name	Description
destination IP	Enter the IP Address of the server that will log the CDR (Call Detail Record) and system messages i.e,the syslog server.

## 1.24 sys syslog type

**Description**

Use this command to set the type of logs that are going to be recorded. This command also can be used to set/display syslog type flag.

**Command Syntax**

*sys syslog type [type]*

**Parameters**

Name	Description
type	Type of syslog (please refers Note)

syslog type : xxxxxxxx

### Output field description

#### Note :

There are 4 types of syslog messages:

#### CDR Log (call message)

Format:

```
sdcmSyslogSend( SYSLOG_CDR, SYSLOG_INFO, String );
```

String = board xx line xx channel xx, call xx, str

board = the hardware board ID

line = the WAN ID in a board

channel = channel ID within the WAN

call = the call reference number which starts from 1 and increments by 1 for each new call

str = C01 Outgoing Call dev xx ch xx (dev:device No. ch:channel No.)

C01 Incoming Call xxxxBps xxxxx (L2TP,xxxxx means Remote Call ID)

C01 Incoming Call xxxx (means connected speed) xxxxx (means Remote Call ID)

L02 Tunnel Connected(L2TP)

C02 OutCall Connected xxxx (means connected speed) xxxxx (means Remote Call ID)

C02 CLID call refused

L02 Call Terminated

C02 Call Terminated

#### Packet Triggered Log

Format:

```
sdcmSyslogSend( SYSLOG_PKTTRI, SYSLOG_NOTICE, String );
```

String = Packet trigger: Protocol=xx Data=xxxxxxxxxx

Protocol: (1:IP 2:IPX 3:IPXHC 4:BPDU 5:ATALK 6:IPNG)

Data: We will send forty-eight Hex characters to the server

#### Filter Log

Format:

```
sdcmSyslogSend(SYSLOG_FILLOG, SYSLOG_NOTICE, String );
```

String = IP[Src=xx.xx.xx.xx Dst=xx.xx.xx.xx prot spo=xxxx dpo=xxxx]S04>R01mD

IP[...] is the packet header and S04>R01mD means filter set 4 (S) and rule 1 (R), match (m) drop (D).

Src: Source Address

Dst: Destination Address

prot: Protocol (TCP,UDP,ICMP)

spo: Source port

dpo: Destination port

## **PPP Log**

Format:

```
sdcmdSyslogSend( SYSLOG_PPPLOG, SYSLOG_NOTICE, String );
```

```
String = ppp:Proto Starting / ppp:Proto Opening / ppp:Proto Closing / ppp:Proto Shutdown
```

```
Proto = LCP / ATCP / BACP / BCP / CBCP / CCP / CHAP/ PAP / IPCP /IPXCP
```

## 1.25 *sys time*

---

**Description** Use this command to set and display system time.

**Command Syntax** *sys time [hour[min[sec]]]*

**Parameters**

Name	Description
[hour[min[sec]]]	Set hour : min : sec

**Output field description** Current time is 05:43:51  
System time is now 05:43:51

## 1.26 sys trcdisp parse

**Packet Trace Description** The router packet traces records and analyzes packets running on LAN and WAN interfaces. It is designed for users with technical backgrounds who are interested in the details of the packet flow on LAN or WAN end of Router. It is also very helpful for diagnostics if you have compatibility problems with your ISP or if you want to know the details of a packet for configuring a filter rule. You can trace the packets in CI command mode via console or Telnet management. (please refers to note for further reference)

**Description** Use this command to display the packet traced during the connection activity.

*sys trcdisp parse*

**Command Syntax**

**Parameters**

Name	Description
parse	Parse the data of packet traced

51 00:12:53.442 ENET0-R[0060] PPPOE Discovery Stage

### Output field description

[index] [timer/second][channel-receive/transmit][length] [protocol] [sourceIP/port] [destIP/port]

There are two ways to dump the trace :

1. Online Trace – display the trace real time on screen
2. Offline Trace – capture the trace first and display later

The details for capturing the trace are as follows :

### Online Trace

#### *Trace LAN Packet*

1. Trace LAN packet

1.1 Disable to capture the WAN packet by entering: **sys trcp channel mpoa00 none**

1.2 Enable to capture the LAN packet by entering: **sys trcp channel enet0 bothway**

1.3 Enable the trace log by entering: **sys trcp sw on** & **sys trcl sw on**

1.4 Display the brief trace online by entering: **sys trcd brief**

or

1.5 Display the detailed trace online by entering: **sys trcd parse**

### **Example:**

```
TC> sys trcp channel mpoa00 none
TC> sys trcp channel enet0 bothway
TC> sys trcp sw on
TC> sys trcl sw on
```



TC> sys trcd brief

22 00:15:42.939 ENET0-T[0064] PPP Section Stage

23 00:15:42.939 ENET0-R[0060] PPP Section Stage

TC> sys trcd parse

-----<0022>-----

LAN Frame: ENET0-XMIT Size: 64/ 64 Time: 00:15:42.939

Frame Type: PPP Section Stage

Ethernet Header:

Destination MAC Addr = 00A0C5292D4F

Source MAC Addr = 00A0C5000103

PPPOE Section Stage: 0x8864

Version Type = 0x0011

Code = 0x0000

Session ID = 0x0002

Length = 0x000C

PPP Header:

Protocol = 0x8021 (IPCP)

IPCP Header:

Code = 0x03 (Configure-Nak)

Identifier = 0x04 (4)

Length = 0x000A (10)

Option 3(IPAddress) = 0xC9010102 (201.1.1.2)

RAW DATA:

0000: 00 A0 C5 29 2D 4F 00 A0-C5 00 01 03 88 64 11 00 ...)-O.....d..

0010: 00 02 00 0C 80 21 03 04-00 0A 03 06 C9 01 01 02 .....!.....

0020: 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 .....

0030: 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 .....

-----<0023>-----

LAN Frame: ENET0-RECV Size: 60/ 60 Time: 00:15:42.939

Frame Type: PPP Section Stage

Ethernet Header:

Destination MAC Addr = 00A0C5000103

Source MAC Addr = 00A0C5292D4F

PPPOE Section Stage: 0x8864

Version Type = 0x0011

Code = 0x0000

Session ID = 0x0002

Length = 0x000C

PPP Header:

Protocol = 0x8021 (IPCP)

IPCP Header:

Code = 0x01 (Configure-Request)

Identifier = 0x05 (5)

Length = 0x000A (10)

Option 3(IPAddress) = 0xC9010102 (201.1.1.2)

RAW DATA:

0000: 00 A0 C5 00 01 03 00 A0-C5 29 2D 4F 88 64 11 00 .....)-O.d..

0010: 00 02 00 0C 80 21 01 05-00 0A 03 06 C9 01 01 02 ....!.....

0020: 00 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 .....

0030: 00 00 00 00 00 00 00 00 00-00 00 00 00 .....

## 2. Trace WAN Packet

2.1 Disable the capture of the LAN packet by entering: **sys trcp channel enet0 none**

2.2 Enable to capture the WAN packet by entering: **sys trcp channel mpoa00 bothway**

2.3 Enable the trace log by entering: **sys trcp sw on & sys trcl sw on**

2.4 Display the brief trace online by entering: **sys trcd brief**

or

2.5 Display the detailed trace online by entering: **sys trcd parse**

### Example:

```
TC> sys trcp channel enet0 none
```

```
TC> sys trcp channel mpoa00 bothway
```

```
TC> sys trcp sw on
```

```
TC> sys trcl sw on
```

```
TC> sys trcd brief
```

```
23 00:15:42.689 MPOA00-T[0064] PPPOE Discovery Stage
```

```
24 00:15:42.729 MPOA00-R[0064] PPPOE Discovery Stage
```

```
TC> sys trcd parse -----<0023>-----
```

MPOA Frame: MPOA00-XMIT Size: 64/ 64 Time: 00:15:42.689

Frame Type: PPPOE Discovery Stage

Ethernet Header:

Destination MAC Addr = 00A0C5000103

Source MAC Addr = 00A0C5292D4F

PPPOE Discovery Stage: 0x8863

Version Type = 0x0011

Code = 0x0019

Session ID = 0x0000

Length = 0x0025

PPPOE TAG:

Service Name 0x0101 = nokia

Host Uniq 0x0103 = 1001

AC Cookie 0x0104 =

End\_of\_List = 0x0000

RAW DATA:

0000: 00 A0 C5 00 01 03 00 A0-C5 29 2D 4F 88 63 11 19 .....)-O.c..

0010: 00 00 00 25 01 01 00 05-7A 79 78 65 6C 01 03 00 ...%....nokia...

0020: 04 31 30 30 31 01 04 00-10 1A 69 D5 F2 D6 68 BF .1001.....i...h.

0030: 16 9A 97 03 0F F7 BB 9D-43 00 00 00 2B CF C6 3F .....C...+..?

-----<0024>-----

MPOA Frame: MPOA00-RECV Size: 64/ 64 Time: 00:15:42.729

Frame Type: PPPOE Discovery Stage

Ethernet Header:

Destination MAC Addr = 00A0C5292D4F

Source MAC Addr = 00A0C5000103

PPPOE Discovery Stage: 0x8863

Version Type = 0x0011

Code = 0x0065

Session ID = 0x0002

Length = 0x0011

PPPOE TAG:

Service Name 0x0101 = nokia

Host Uniq 0x0103 = 1001

End\_of\_List = 0x0000

#### RAW DATA:

```
0000: 00 A0 C5 29 2D 4F 00 A0-C5 00 01 03 88 63 11 65 ...) -O.....c.e
0010: 00 02 00 11 01 01 00 05-7A 79 78 65 6C 01 03 00 .....nokia...
0020: 04 31 30 30 31 00 00 00-00 00 00 00 00 00 00 00 .1001.....
0030: 00 00 00 00 00 00 00 00-00 00 00 00 00 00 00 00 .....
```

### **Offline Trace**

#### *1. Trace LAN packet*

- 1.1 Disable the capture of the WAN packet by entering: **sys trcp channel mpoa00 none**
- 1.2 Enable the capture of the LAN packet by entering: **sys trcp channel enet0 bothway**
- 1.3 Enable the trace log by entering: **sys trcp sw on** & **sys trcl sw on**
- 1.4 Wait for packet passing through the modem over LAN
- 1.5 Disable the trace log by entering: **sys trcp sw off** & **sys trcl sw off**
- 1.6 Display the trace briefly by entering: **sys trcp brief**
- 1.7 Display specific packets by using: **sys trcp parse <from\_index> <to\_index>**

#### *2. Trace WAN packet*

- 2.1 Disable the capture of the LAN packet by entering: **sys trcp channel enet0 none**
- 2.2 Enable the capture of the WAN packet by entering: **sys trcp channel mpoa00 bothway**
- 2.3 Enable the trace log by entering: **sys trcp sw on** & **sys trcl sw on**
- 2.4 Wait for packet passing through the modem over WAN
- 2.5 Disable the trace log by entering: **sys trcp sw off** & **sys trcl sw off**
- 2.6 Display the trace briefly by entering: **sys trcp brief**
- 2.7 Display specific packets by using: **sys trcp parse <from\_index> <to\_index>**

## 1.27 sys version

---

**Description** Use this command to show the system firmware version, including RAS version, romRasSize, system up time, bootbase version, RAS CODE, RomFile Checksum

**Command Syntax** `sys version`

**Output field description** RAS version: V3.40(GJ.0)A1 | 05/15/2002  
romRasSize: 1061514  
system up time: 7:08:33 (273c08 ticks)  
bootbase version: V1 | 01/11/2002  
RAS CODE: TC ATU-R Oct 04 2002 10:20:43  
Romfile Checksum :d018

Field	Description
RAS version	Ras version and date created
romRasSize	Size of the Ras File
system up time	Duration of system up since restart
bootbase version	Bootbase version and date created
RAS CODE	Ras code and date created

## 1.28 sys view

---

<b>Description</b>	Use this command to view the configuration file autoexec.net content that run as the system started. The autoexec.net file contains the command that user can configure and wish to execute when the system started.
<b>Command Syntax</b>	<i>sys view autoexec.net</i>  sys>sys view autoexec.net
<b>Output field</b>	sys errctl 0 sys trcl level 5 sys stdio 0 sys trcl type 1180 sys trcp cr 64 96 sys trcl sw off sys trcp sw off ip tcp mss 512 ip tcp limit 2 ip tcp irtt 65000 ip tcp window 2 ip tcp ceiling 6000 : : : :

## 1.29 sys wdog switch

---

**Description** Many network protocols use "watchdog" traffic to periodically check the availability of a DSL-to-LAN connection. This traffic can keep a connection open even when there is no other traffic, negating the benefits of on-demand dialing and bandwidth. Spoofing lets the router ignore the watchdog traffic and open a connection only when there is data to be transferred, thus saving thousands of dollars a month, especially over long-distance connections.  
Use this command to switch on/off the watchdog function.

*sys wdog switch [on/off]*  
*sys wdog switch [1/0]*

### Command Syntax

Name	Description
On ; 1	Switch on the watchdog function
Off ; 0	Switch off the watchdogfunction

### Parameters

sys>sys wdog switch  
watchDog: On

### Output field description

### 1.30 *sys wdog cnt*

---

**Description** When a user logs onto the computer, the internal timer in WatchDog starts counting down the user's time available. When the user runs out of time, WatchDog can either restart the system. Use this command to set and display the system watchdog counter value.

*sys wdog cnt [value]*

**Command Syntax**

**Parameters**

Name	Description
Value	Wdog counter value (0~34463) Default : 180



### 1.31 *sys romreset*

---

<b>Description</b>	Use this command to restore default romfile /configuration file. Current setting will be erased.
<b>Command Syntax</b>	<i>sys romreset</i>  sys>sys romreset
<b>Output field Description</b>	Default Romfile reset... System Restart(Console speed will be changed to 9600 bps)  Bootbase Version: V1   01/11/2002 15:23:37 RAM: Size = 8192 Kbytes DRAM POST: Testing: 4224K .... : : : :



### 1.33 sys ddns debug

---

**DDNS Description** Dynamic DNS (Domain Name System) allows you to update your current dynamic IP address with one or many dynamic DNS services so that everyone can contact you (in *NetMeeting*, *CU-SeeMe*, or other services). You can also access your FTP server or Web Site on your own computer using DNS-like address that will never change instead of using an IP address that changes each time of reconnection.

Use this command to enable or disable ddns service.

**Description** *sys ddns debug <0|1>*

**Command Syntax**

Name	Description
0	Disable ddns service
1	Enable ddns service

**Parameters**

sys>sys ddns debug  
DDNS debug = 1

**Output field description**

### 1.34 *sys ddns display*

**Description** Use this command to show the dynamic DNS status

**Command Syntax** *sys ddns display*<iface name>

**Parameters**

Name	Description
iface name	Interface name (enif0, enif1, enif 2 ...)

**Output field description**

DDNS Status

state	=	0, flags	=	0
pauseTime	=	0, timerID	=	0
startcnt	=	0, stopcnt	=	2
retrycnt	=	0, eventqcnt	=	0
socketID	=	-1,		
DomainName	=			
eMail Address	=			
update IP	=	192.168.1.23		
update time	=	00:00:00 Thu. Jan. 01, 1970		
retCode	=	good		
IPort	=	1026, rPort	=	0
username	=			
password	=			

### 1.35 *sys ddns restart*

---

**Description** Use this command to trace if the login to the ddns server is pass successfully and to diagnostic if the ddns function works well. Enter this command after debugging the ddns. You should get some information regarding the login from the server on the screen. Success or fail, the server will tell you.

*sys ddns restart <iface name>*

**Command Syntax**

Name	Description
iface name	Interface name (enif0, enif1, enif 2 ...)

**Parameters**

ifStartDDNS: ifp = 680960,option=0  
ATU-R>EventDDNSInit: ifp = ,addr=227.160.0.0  
eventDDNSInit: DDNS notactivated  
eentddnsDDNSInit: state=0

**Output field description**

### 1.36 *sys ddns logout*

---

**Description** Use this command to log out the ddns service.

**Command Syntax** *sys ddns logout <iface name>*

**Parameters**

Name	Description
iface name	Interface name (enif0, enif1, enif 2 ...)

### 1.37 ip address

---

**Description** Where you obtain your network number depends on your particular situation. If the ISP or your network administrator assigns you a block of registered IP addresses, follow their instructions in selecting the IP addresses and the subnet mask. If the ISP did not explicitly give you an IP network number, then most likely you have a single user account and the ISP will assign you a dynamic IP address when the connection is established.

In CI command, user can also have the chance to view the IP address. Use this command to display and set the IP address.

*ip address [addr]*

**Command Syntax**

Name	Description
Addr	Enter new IP address to be set

**Parameters**

ATU-R> ip address  
140.113.2.34 (set)  
ATU-R>ip address 140.113.2.45

**Output field description**

ATU-R> ip address  
140.113.2.45 (set)

### 1.38 *ip alias*

---

**Description** In a typical environment, a LAN router is required to connect two local networks. The board supports to connect three local networks to the ISP or remote node, we call this function as 'IP alias'. In this case, an internal router is not required. For example, the network manager can divide the local network into three networks and connect them to the internet using Router's single user account. The Router supports three virtual LAN interfaces via its single physical Ethernet interface. There are three internal virtual LAN interfaces for the router to route the packets from/to the three networks correctly. They are enif0 for the major network, enif0:0 for the IP alias 1 and enif 0:1 for the IP alias 2.

Use this command to create a new alias for interface (Default existing aliases are enif0:0 and enif0:1)

*ip alias <iface>*

#### **Command Syntax**

Name	Description
iface	Alias interface (enif0:0 and enif0:1)

#### **Parameters**



### 1.39 *ip aliasdis*

---

**Description**      Use this command to enable or disable routing between alias interfaces.

**Command Syntax**      *ip aliasdis <0/1>*

**Parameters**

Name	Description
0	Disable routing between alias interfaces
1	Enable routing between alias interfaces

**Output field Description**      sys>ip aliasdis 0  
Disable IP Alias Route = 0

## 1.40 ip arp status

**Description** Address Resolution Protocol (ARP) is a protocol for mapping an Internet Protocol address to a physical machine address that is recognized in the local network. Use this command to show the (ARP) table.

*ip arp status <iface>*

**Command Syntax**

**Parameters**

Name	Description
iface	Enter the iface name, if blank, the arp status will show the default iface arp table

**Output field description**

received x badtype x bogus add x reqst in x replies x reqst out x  
cache hit 0 (0%) cache miss 2 (100%)  
IP-addr Type Time Addr Stat iface  
xx.xx.xx.xx 10MbEthernet 0 ff:ff:ff:ff:ff:ff 43 Null  
xx.xx.xx.xx 10MbEthernet 0 ff:ff:ff:ff:ff:ff 43 Null  
Num of arp entries= 2

## 1.41 *ip dhcp client release*

---

**Description** DHCP (Dynamic Host Configuration Protocol, RFC 2131 and RFC 2132) allows individual clients to obtain TCP/IP configuration at startup from a server. Use this command to release the current ip setting in order to obtain a new or refresh the ip from the dhcp server.

*ip dhcp <iface> client release*

**Command Syntax**

Name	Description
iface	Driver interface (enif0, enif0:1 ...)

**Parameters**

## 1.42 *ip dhcp client renew*

---

**Description** DHCP (Dynamic Host Configuration Protocol, RFC 2131 and RFC 2132) allows individual clients to obtain TCP/IP configuration at startup from a server. Use this command to renew or to get ip from the dhcp server after releasing the previous ip.

*ip dhcp <iface> client renew*

**Command Syntax**

Name	Description
iface	Driver interface (enif0, enif0:1 ...)

**Parameters**

### 1.43 ip dhcp status

---

**Description** Use this command to show the dhcp status of the board.

**Command Syntax** *ip dhcp <iface> status*

**Parameters**

Name	Description
iface	Driver interface (enif0, enif0:1 ...)

**Output field description**

DHCP on iface enif1 is client  
Hostname : Router.p  
Domain Name : p  
Server IP address: 167.206.3.167  
Client IP address: 67.b.c.d/21  
DNS server : 167.206.3.167, 167.206.7.4, 67.b.c.1  
Default gateway: 67.b.c.1  
Lease time : 302395 seconds  
Renewal time: 151195 seconds  
Rebind time : 264593 seconds  
Client State = 3, retry = 0  
periodtimer = 1307, timer = 150181  
flags = 2  
Status:  
Packet InCount: 17, OutCount: 2, DiscardCount: 15

## 1.44 ip dns query

---

**Description** Use this command to set the dns query

**Command Syntax** *ip dns query* **<parameters>**

**Parameters**

Name	Description
address<ipaddr> [tm]	resolve ip-addr to name
	<ipaddr> Ip address
	[tm] timeout
debug <num>	enable dns debug value
	<num> Debug value
name <hostname> [tm]	resolve name to ip-addr
	<hostname> Hostname
	[tm] timeout
Status	display dns query status
Table	display dns query table

## 1.45 *ip dns stats*

---

**Description** Use this command to display or clear dns statistic counters

**Command Syntax** *ip dns stats <parameters>*

**Parameters**

Name	Description
clear	Display dns statistic counters
disp	Clear dns statistic counters

**Output field Description**

```
sys>ip dns stats disp
DNS Proxy Statistics
State: 0
Proxy Table Size: 16
Active DNS: 0.0.0.0
Primary DNS: 0.0.0.0
Secondary DNS: 0.0.0.0
Max Entry: 0
Timeouts: 0
Response Discards: 0
Request Discards: 0
Send Failures: 0
No DNS Entry : 0
Request Count : 0
Free Count : 0
```

## 1.46 *ip httpd*

---

**Description** Use this command to set the web debug message.

**Command Syntax** *ip httpd debug <0/1>*

**Parameters**

Name	Description
0	Disable http debug
1	Enable httpd debug

**Output field description** *ip httpd debug 1*  
*ip httpd debug*  
httpd debug: on



## 1.47 *ip icmp status*

---

<b>Description</b>	Use this command to display the icmp service statistic satus.	
<b>Command Syntax</b>	<i>ip icmp status</i>	
<b>Output field description</b>	Below are the informations shown by the command:	
	icmplnMsgs	icmpOutMsgs
	icmplnErrors	icmpOutErrors
	icmplnDestUnreachs	icmpOutDestUnreachs
	icmplnTimeExcds	icmpOutTimeExcds
	icmplnParmProbs	icmpOutParmProbs
	icmplnSrcQuenchs	icmpOutSrcQuenchs
	icmplnRedirects	icmpOutRedirects
	icmplnEchos	icmpOutEchos
	icmplnEchoReps	icmpOutEchoReps
	icmplnTimestamps	icmpOutTimestamps
	icmplnTimestampsReps	icmpOutTimestampsReps
	icmplnAddrMasks	icmpOutAddrMasks
	icmplnAddrMaskReps	icmpOutAddrMasksReps

## 1.48 *ip icmp discovery*

---

**Description** Use this command to set the icmp router discovery flag.

**Command Syntax** *ip icmp discovery <iface> <1/0>*

**Parameters**

Name	Description
iface	Driver interface (enif0, enif0:1,...)
0	Disable ICMP router discovery
1	Enable ICMP router discovery

*ip icmp discovery enif0 1*

*ip icmp discovery enif0*

**Output field description** ICMP router discovery: on

## 1.49 ip ifconfig

**Description** Use this command to show the network interface

**Command Syntax** *ip ifconfig*

**Output field description** *ip if*

enif0: mtu 1500  
inet 192.168.1.1, netmask 0xffffffff, broadcast 192.168.1.255  
RIP RX:None, TX:None

InOctets	InUnicast	InMulticast
InDiscards	InErrors	InUnknownProtos
OutOctets	OutUnicast	OutMulticast
OutDiscards	OutErrors	

enif0:0: mtu 1500  
inet 192.168.2.1, netmask 0xffffffff, broadcast 192.168.2.255  
RIP RX:None, TX:None

InOctets	InUnicast	InMulticast
InDiscards	InErrors	InUnknownProtos
OutOctets	OutUnicast	OutMulticast
OutDiscards	OutErrors	

enif0:1: mtu 1500  
inet 192.168.3.1, netmask 0xffffffff, broadcast 192.168.3.255  
RIP RX:None, TX:None

InOctets	InUnicast	InMulticast
InDiscards	InErrors	InUnknownProtos
OutOctets	OutUnicast	OutMulticast
OutDiscards	OutErrors	

wanif0: mtu 1500  
inet 192.168.1.1, netmask 0x00000000, broadcast 255.255.255.255  
RIP RX:None, TX:None

InOctets	InUnicast	InMulticast
InDiscards	InErrors	InUnknownProtos
OutOctets	OutUnicast	OutMulticast
OutDiscards	OutErrors	

### 1.50 *ip ping*

---

**Description** Use this command to ping any machine (with an IP address) on LAN or WAN.

**Command Syntax** *ip ping <host id>*

**Parameters**

Name	Description
host id	Remote machine IP address

**Output field description**

```
Ip ping 192.168.1.1
Resolving 192.168.1.1... 192.168.1.1
sent    Rcvd    rate    rtt     avg     mdef    max     min
1       1        100     0       0       0       0       0
2       2        100     0       0       0       0       0
3       3        100     0       0       0       0       0
```

## 1.51 ip route status

**Description** Use the ip route status command to display IP routing table series.

**Command Syntax** *ip route status [iface]*

**Parameters**

Name	Description
iface	Driver interface (enif0, enif0:1,...)

**Output field description**

Dest	FF	Len	Device	Gateway	Metric	stat	Timer	Use
192.168.1.0	00	24	enif0	192.168.1.1	1	041b	0	0
192.168.2.0	00	24	enif0	192.168.2.1	1	041b	0	3

Field	Description
Destination	Destination address IP route mask
FF	The interface or remote node. See example below. The "FF" field means the interface index. For example: Ethernet interface: always 00 Remote node 1 : 00 Remote node 2 : 01 Remote node 3 : 02 Remote node 4 : 03 Remote node 5 : 04 Remote node 6 : 05 Remote node 7 : 06 Remote node 8 : 07
Len	The network mask
Device	The physical interface
Gateway	IP address or IP alias of the gateway router.
Metric	Indicates how many internet work hop (routers) have been traversed in the trip to the destination. This value is between 1 and 15 for a valid route.
Stat	RD internal debug use only
Timer	0 = never timeout, if this entry is learned from RIP,it will start with default 180 seconds and then count down. If it does not receive the refresh RIP packet, this routing entry will be cleared after timeout.
Use	Number of times a route entry was used to route packets. (sending packet counter)

## 1.52 ip route add

**Description** The router using IP configuration information (eg., subnets, gateways) to automatically create a routing table that dictates how the system will send IP packets to other host systems. Use this command to add a new IP routing configuration in the routing table.

*ip route add <dest addr>[/<bits>] <gateway> [<metric>]*

### Command Syntax

### Parameters

Name	Description
dest addr	Destination address of routing
bits	Value of bits
gateway	IP address acts as gateway in routing
metric	Hop count to measure the distance between the source and a destination network. Each hop in a path from source to destination is assigned a hop count value, which is typically 1

```
sys>ip route add 172.21.0.0 192.168.1.1
```

```
sys>ip route status
```

### Output field description

Dest	FF	Len	Device	Gateway	Metric	stat	Timer	Use
192.168.1.0	00	24	enet0	192.168.1.1	1	041b	0	0
172.21.0.0	00	32	enet0	192.168.1.1	1	001b	0	0

### 1.53 *ip route addiface*

---

**Description** Use this command to add an interface to a routing table.

**Command Syntax** *ip route addiface <dest addr>[/<bits>] <iface> [<metric>]*

**Parameters**

Name	Description
dest addr	Destination address of routing
bits	Value of bits
iface	Input the interface name to add in routing
metric	Hop count to measure the distance between the source and a destination network. Each hop in a path from source to destination is assigned a hop count value, which is typically 1

## 1.54 ip route addprivate

**Description** Though it may seem obvious that the NAT can talk on its connected networks, it is nevertheless necessary to add routes for those. Use this command if you want to add some private entries that you don't want broadcast to the outside world.

*ip route addprivate <dest addr>[/<bits>] <gateway> [<metric>]*

### Command Syntax

### Parameters

Name	Description
dest addr	Destination address of routing
bits	Value of bits
gateway	IP address acts as gateway in routing
metric	Hop count to measure the distance between the source and a destination network. Each hop in a path from source to destination is assigned a hop count value, which is typically 1

```
sys>ip route addprivate 172.21.0.0 192.168.1.1
```

```
sys>ip route status
```

### Output field description

Dest	FF	Len	Device	Gateway	Metric	stat	Timer	Use
192.168.1.0	00	24	enet0	192.168.1.1	1	041b	0	0
172.21.0.0	00	32	enet0	192.168.1.1	1	001f	0	0



### 1.55 *ip route drop*

---

**Description** Use this command to drop the routing gateway.

**Command Syntax** *ip route drop <host addr> [/<bits>]*

**Parameters**

Name	Description
host addr	Enter the host address to drop
bits	Bits value

### 1.56 *ip routeop help*

---

<b>Description</b>	Use this command to display IP policy routing CI commands on-line help.	
<b>Command Syntax</b>	<i>ip routeop help</i>	
<b>Output field description</b>	ip routeop help	Display help message
	ip routeop policy	List all policy
	ip routeop create	Create a new policy
	ip routeop set	Set Policy & Rules
	ip routeop delete	Delete a policy
	ip routeop rule	List policy rules
	ip routeop apply	Apply ip policy routing to lan or wan
	ip routeop cancel	Cancel ip policy routing to lan or wan

### 1.57 *ip route* policy

---

**Description**      Use this command to display IP policy routing list

**Command Syntax**      *ip route* policy

**Output field description**                      IP Routing Policy List

Policy #	Name
01	_____
02	_____
03	_____
04	_____
05	_____
06	_____
07	_____
08	_____
09	_____
10	_____
11	_____
12	_____

### 1.58 *ip routeop create*

---

**Description** Use this command to create a new IP policy routing

**Command Syntax** *ip routeop create <policy no> <name>*

**Parameters**

Name	Description
policy no	Policy no
name	Policy routing name

**Output field description**

ip routeop create 1 test  
ip routeop policy

### 1.59 *ip route delete*

---

**Description** Use this command to delete a IP policy routing.

**Command Syntax** *ip route delete <policy no>*

**Parameters**

Name	Description
policy no	Policy no

**Output field description** ip route delete 1  
ip route policy

## 1.60 *ip route* rule

---

**Description** Use this command to delete a IP policy routing rule.

**Command Syntax** *ip route* rule <policy no>

**Parameters**

Name	Description
policy no	Policy no

**Output field description** ip route

## 1.61 *ip route* set

---

**Description** Use this command to set a IP policy routing rule. There 12 ip policy routing in system and each policy routing has 6 rules. When you use this command, you have to use “policy” and “rule” to set the policy no and rule no first. Then set the other parameters.

**Command Syntax** *ip route* set <command>

### Parameters

Command	Description
help	Display set on-line help
policy	Set the policy no
rule	Set the rule no
active	Active rule or not
cprotocol	Set criteria IP protocol
ctos	Set criteria type of service
len	Set criteria length of packet
cpre	Set criteria precedence
clencomp	Set criteria len comparator
sastart	Set criteria source start address
saend	Set criteria source end address
spstart	Set criteria source start port
spend	Set criteria source end port
dastart	Set criteria destination start address
daend	Set criteria destination end address
dpstart	Set criteria destination start port
dpend	Set criteria destination end port
action	Set action matched or not matched
gateway	Set action gateway address
log	Set action log or not
atos	Set action type of service
apre	Set action precedence
disp	Display rule content
save	Save rule
exit	Don't save rule

## 1.62 *ip routeop apply lan*

---

**Description** Use this command to apply IP policy routing settings to lan interface.

**Command Syntax** *ip routeop apply lan <policy no>*

**Parameters**

Name	Description
policy no	Policy no

**Output field description** The following CI command will apply policy no 1 and 3 to lan interface

Ip routeop apply lan 1 3



### 1.63 *ip route* apply wan

---

**Description** Use this command to apply IP policy routing settings to wan interface.

**Command Syntax** *ip route* apply wan <node> <policy no>

**Parameters**

Name	Description
Node	Remote node no
policy no	Policy no

**Output field description** The following CLI command will apply policy no 1 and 3 to wan interface 0

Ip route apply wan 0 1 3

### 1.64 *ip routep cancel lan*

---

<b>Description</b>	Use this command to remove IP policy routing settings from lan interface.
--------------------	---

<b>Command Syntax</b>	<i>ip routep cancel lan</i>
-----------------------	-----------------------------

<b>Output field description</b>	Ip routep cancel lan
---------------------------------	----------------------

### 1.65 *ip route cancel wan*

---

**Description** Use this command to remove IP policy routing settings from lan interface.

**Command Syntax** *ip route cancel wan <node>*

**Parameters**

Name	Description
Node	Remote node no

**Output field description** Ip route cancel wan 0

## 1.66 *ip status*

---

<b>Description</b>	Use this command to show the ip statistics counters		
<b>Command Syntax</b>	<i>ip status</i>		
<b>Output field description</b>	Below are information shown in ip statistics counters		
	( 1 )ipForwarding	1	( 2 )ipDefaultTTL 255
	( 3 )ipInReceives	0	( 4 )ipInHdrErrors 0
	( 5 )ipInAddrErrors	0	( 6 )ipForwDatagrams 0
	( 7 )ipInUnknownProtos	0	( 8 )ipInDiscards 0
	( 9 )ipInDelivers	0	(10)ipOutRequests 387
	(11)ipOutDiscards	0	(12)ipOutNoRoutes 0
	(13)ipReasmTimeout	30	(14)ipReasmReqds 0
	(15)ipReasmOKs	0	(16)ipReasmFails 0
	(17)ipFragOKs	0	(18)ipFragFails 0
	(19)ipFragCreates	0	

## 1.67 ip udp status

---

<b>Description</b>	Use this command to display udp status or statistic counters and control blocks			
<b>Command Syntax</b>	<i>ip status udp</i>			
<b>Output field description</b>	Below are information shown in ip statistics counters			
	( 1 )udplnDatagrams	0	( 2 )udpNoPorts	0
	( 3 )udplnErrors	0	( 4 )udpOutDatagrams	0
	&UCB	Rcv-Q	Local	Socket
	6c87a8	0	0.0.0.0 :	161
	6c856c	0	0.0.0.0 :	68
	6c8538	0	0.0.0.0 :	67
	6c8504	0	0.0.0.0 :	1025
	6c84d0	0	0.0.0.0 :	1024
	6c849c	0	0.0.0.0 :	53
	6c8468	0	0.0.0.0 :	69
	6c8434	0	0.0.0.0 :	263
	6c82c8	0	0.0.0.0 :	520

## 1.68 *ip tcp status*

---

<b>Description</b>	Use this command to display ip status and counters
--------------------	--

<b>Command Syntax</b>	<i>ip tcp status</i>
-----------------------	----------------------

<b>Output field description</b>	<pre>sys &gt; ip tcp status ( 1)tcpRtoAlgorithm      4 ( 2)tcpRtoMin            0 ( 3)tcpRtoMax            4294967295 ( 4)tcpMaxConn            4294967295 ( 5)tcpActiveOpens       0 ( 6)tcpPassiveOpens      0 ( 7)tcpAttemptFails      0 ( 8)tcpEstabResets       0 ( 9)tcpCurrEstab         0 (10)tcpInSegs            0 (11)tcpOutSegs           0 (12)tcpRetransSegs       0 (14)tcpInErrs            0 (15)tcpOutRsts           0 &amp;TCB Rcv-Q Snd-Q Local socket 804b5de8  0  0 0.0.0.0:80 804b5cd4  0  0 0.0.0.0:21 804b5bc0  0  0 0.0.0.0:23 Remote socket      State 0.0.0.0:0         Listen (S) 0.0.0.0:0         Listen 0.0.0.0:0         Listen</pre>
---------------------------------	--

## 1.69 *ip xparent join*

---

**Description** Use this command to display interfaces that are joined in a transparent bridge with interface 1. If specified, join interface 2 in the transparent bridge with interface 1.

*ip xparent join <iface1>[<iface2>]*

**Command Syntax**

**Parameters**

Name	Description
iface 1	First interface
iface 2	Second interface

**Output field description**

sys> ip xparent join enif0  
The following iface is the same net as enif0:  
enif0:1  
enif0:0

### 1.70 *ip xparent break*

---

**Description** Use this command to detach the interface by breaking any transparent bridging with other interfaces.

**Command Syntax** *ip xparent break <iface>*

**Parameters**

Name	Description
iface	Interface



## 1.71 *ip igmp debug*

---

**Description** Use this command to display or set IGMP debug level.

**Command Syntax** *ip igmp debug [level]*

**Parameters**

Name	Description
level	1,2,3...

**Output field description**

```
sys>ip igmp debug
IGMP debug level : 1
sys>ip igmp debug 2
sys>ip igmp debug
IGMP debug level 2
```

## 1.72 ip igmp forwardall

---

**Description** Use this command to display or set IGMP forwarding to all interfaces switch

**Command Syntax** *ip igmp forwardall [0/1]*

**Parameters**

Name	Description
0	Disable ip igmp forwardall
1	Enable ip igmp forwardall

**Output field description**

sys>ip igmp forwardall  
IGMP forward to all interface : off  
sys>ip igmp forwardall 1  
sys>ip igmp forwardall  
IGMP forward to all interface : on

### 1.73 ip igmp querier

---

**Description** Use this command to display or set IGMP becoming a non-querier switch

**Command Syntax** *ip igmp querier [0/1]*

**Parameters**

Name	Description
0	Disable ip igmp querier
1	Enable ip igmp querier

**Output field description**

sys>ip igmp querier  
IGMP become non-querier : off  
sys>ip igmp querier 1  
sys>ip igmp querier  
IGMP become non-querier : on

## 1.74 ip igmp iface

**Description** Use this command to set or change the configuration of the interface.

**Command Syntax** *ip igmp iface <iface>sub commands*

**Sub commands&Parameters** *<iface> grouptm <timeout>*  
- set igmp group timeout

Name	Description
iface	Name of the interface
timeout	Timeout value

*<iface> interval <interval>*  
- set igmp query interval

Name	Description
iface	Name of the interface
interval	Interval value

*<iface> join <group>*  
- join a group on iface

Name	Description
iface	Name of the interface
group	Group address

*<iface> leave <group>*  
- leave a group on iface

Name	Description
iface	Name of the interface
group	Group address

*<iface> query*  
- send query on iface

Name	Description
Iface	Name of the interface

*<iface> rsptime [time]*  
- set igmp response time

Name	Description
iface	Name of the interface
time	IGMP maximum response time value

*<iface> start*  
- turn on igmp on iface

Name	Description
iface	Name of the interface

*<iface> stop*  
- turn off igmp on iface

Name	Description
iface	Name of the interface

*<iface> ttl <threshold>*

- set ttl threshold

Name	Description
iface	Name of the interface
threshold	Multicast TTL threshold value

**<iface> v1compat [0/1]**

turn off/on v1compat on iface

Name	Description
iface	Name of the interface
0/1	Off/on value

## 1.75 *ip igmp robustness*

---

**Description** The IGMP robustness variable provides fine-tuning to allow for expected packet loss on a subnet. By default, the robustness variable is set to 2. You might want to increase this value if you expect a subnet to be loss. Use this command to change the value of the robustness variable. The minimum value of the variable is 2. If there is no variable input, this command displays the current igmp robustness variable.

*ip igmp robustness [<variable>]*

**Command Syntax**

Name	Description
variable	Numeric (2,3,4,..)

**Parameters**

sys>ip igmp robustness  
IGMP robustness variable is 2  
sys>ip igmp robustness 4

**Output field description**

IGMP robustness variable is 4

## 1.76 ip igmp status

---

**Description** Use this command to display IGMP settings on all interfaces.

**Command Syntax** *ip igmp status*

Group	groupLink	ifaceLink	flags
224.0.0.12	[006c8364 001c5ac0]	[006c83a8 006c83a8]	0003
224.0.0.9	[006c8330 006c8398]	[006c8374 006c8374]	0001
224.0.0.2	[006c82fc 006c8364]	[006c8340 06c8340]	0001
224.0.0.1	[001c5ac0 006c8330]	[006c830c 006c830c]	0001

iface enif0 flags 00000000  
query interval 125 sec, max rsp time 90 1/10 sec, group timeout 260  
sec,counter 1, query timer 16 sec, v1 host present timer 0 sec,tll  
threshold 23  
multicast group:

iface enif0:0 flags 00000000  
query interval 0 sec, max rsp time 0 1/10 sec, group timeout 0  
sec,counter 0, query timer 0 sec, v1 host present timer 0 sec,tll  
threshold 0  
multicast group:

iface enif0:1 flags 00000000  
query interval 0 sec, max rsp time 0 1/10 sec, group timeout 0  
sec,counter 0, query timer 0 sec, v1 host present timer 0 sec,tll  
threshold 0  
multicast group:

## 1.77 lan index

---

**Description** Use this command to set the lan index no then use other CI commands to set ip alias or other information.

**Command Syntax** *lan index <index>*

Parameters	Name	Description
	index	Lan index. 1 is main lan interface 2 is ip alias #1 interface 3 is ip alias #2 interface

**Output** sys> lan index 2  
enif0:0 is selected



## 1.78 *lan display*

---

**Description** Use this command to display lan interface information..

**Command Syntax** *lan display*

**Output**

```
sys> lan index 2
enif0:0 is selected
sys> lan display
Active: Yes
Interface: enif0:0
IP Address: 192.168.2.1
Subnet Mask: 255.255.255.0
RIP Direction: Both
RIP Version: RIP-2M
Protocol Filter Set:
Incoming:  0 0 0 0
Outgoing:  0 0 0 0
```

## 1.79 *lan ipaddr*

---

**Description** Use this command to set the lan ip address and network mask.

**Command Syntax** *lan ipaddr <ipaddr> <netmask>*

**Parameters**

Name	Description
ipaddr	IP address
netmask	Network mask

**Output** tc> lan ipaddr 192.168.2.1 255.255.255.0

## 1.80 *lan rip*

---

**Description** Use this command to set the lan RIP information.

**Command Syntax** *lan rip <dir> <ver>*

**Parameters**

Name	Description
dir	Set RIP direction. You can set it to <i>none</i> , <i>in</i> , <i>ou</i> or <i>both</i> .
ver	Set RIP version. You can set it to <i>rip1</i> , <i>rip2b</i> or <i>rip2m</i> .

**Output** sys> lan rip both rip2m

## 1.81 *lan save*

---

**Description**    Use this command to save the lan information.

**Command Syntax**    *lan save*

**Output**    sys> lan save

## 1.82 *lan clear*

---

**Description**    Use this command to clear the lan information.

**Command Syntax**    *lan clear*

**Output**    sys> lan clear

### 1.83 *lan active*

---

**Description**    Use this command to active lan interface or not.

**Command Syntax**    *lan active <yes/no>*

**Output**    sys> lan index 2  
             enif0:0 is selected  
             sys> lan active yes

## 1.84 bridge cnt disp

**Description** Use this command to display bridge routing statistics table.

**Command Syntax** *bridge cnt disp <value>*

**Parameters**

Name	Description
value	Numerical value

**Output field description**

sys>bridge cnt disp 1

\*\*\*Last Bridge Route Code 0

WanLanIdErr	0	WanMacHdrErr	0
WanFiltered	0	WanQueLanErr	0
LanMacHdrErr	0	LanFiltered	0
LanWatchDogQueErr	0	LanNotBrfNotCast	0
LanNoWanDevice	0	LanNoNode	0
LanNoDialOnCast	0	LanDial	0
LanDialNotAllow	0	BrCastIPNotSent	0
BrCastIPXNotSent	0	BrCastARPNotSent	0
BrfDial	0	BrfDialNotAllow	0
WanNoNode	0	BrfAddLocalNode	0

### 1.85 *bridge cnt clear*

---

**Description** Use this command to clear bridge routing statistics table.

**Command Syntax** *bridge cnt clear <value>*

**Parameters**

Name	Description
value	Numerical value



## 1.86 bridge stat disp

**Description** Use this command to display bridge packet statistics table.

**Command Syntax** *bridge stat disp <value>*

**Parameters**

Name	Description
value	Numerical value

**Output field description**

sys>bridge stat disp 1  
\*\*\*Last Bridge Pkt code 0

WanInIP	0	WanInIPX	0
WanInARP	0	WanInATLK	0
WanInOTHR	0	WanInIPbrCast	0
WanInIPXbrCast	0	WanInARPbrCast	0
WanInATLKbrCast	0	WanInOTHRbrCast	0
LanInIP	0	LanInIPX	0
LanInARP	0	LanInATLK	0
LanInOTHR	0	LanInIPbrCast	0
LanInIPXbrCast	0	LanInARPbrCast	0
LanInATLKbrCast	0	LanInOTHRbrCast	0
LanInWatchDog	0	WanInOdd	0
WanInWanOut	0	WanInOwn	0
WanInLanOut	0	LanInWanOut	0
LanInWanOut2	0		

### 1.87 *bridge stat clear*

---

**Description** Use this command to clear bridge packet statistics table.

**Command Syntax** *bridge stat clear <value>*

**Parameters**

Name	Description
value	Numerical value

1.88 ether config

Description	Use this command to display the current Ethernet configuration.																																										
Command Syntax	<i>ether config</i>																																										
Output field description	<div>-----NDIS Configuration Block-----</div> <div>type=1 flags=0001</div> <div>Board/Chassis:1 Lines/Board:1 Channels/Lines:2 Total Channel:2</div> <div>task-id=1b0bb4 event-q=675384(19) data-q=6753c8(1a) func-id=2</div> <div>board-cfg=6aef64 line-cfg=6aef7c chann-cfg=6aef90</div> <div>board-pp (6aefb0)</div> <div>6c7f20</div> <div>line-pp (6aefb4)</div> <div>6c4b00</div> <div>chann-pp (6aefb8)</div> <div>5c9020 5c950c</div> <div>-----Board Display-----</div> <table><tr><th>ID</th><th>slot#</th><th>n-line</th><th>n-chann</th><th>status</th><th>line-cfg</th><th>chann-cfg</th></tr><tr><td>00</td><td>0</td><td>1</td><td>2</td><td>0001</td><td>6aef7c</td><td>6aef90</td></tr></table> <div>-----Line Display-----</div> <table><tr><th>ID</th><th>line#</th><th>board-id</th><th>n-chann</th><th>chann-cfg</th></tr><tr><td>00</td><td>1</td><td>00</td><td>2</td><td>6aef90</td></tr></table> <div>-----Channel Display-----</div> <table><tr><th>ID</th><th>chann#</th><th>line-id</th><th>board-id</th><th>address</th><th>name</th></tr><tr><td>00</td><td>1</td><td>00</td><td>00</td><td>5c9020</td><td>enet0</td></tr><tr><td>01</td><td>2</td><td>00</td><td>00</td><td>5c950c</td><td>enet1</td></tr></table>	ID	slot#	n-line	n-chann	status	line-cfg	chann-cfg	00	0	1	2	0001	6aef7c	6aef90	ID	line#	board-id	n-chann	chann-cfg	00	1	00	2	6aef90	ID	chann#	line-id	board-id	address	name	00	1	00	00	5c9020	enet0	01	2	00	00	5c950c	enet1
ID	slot#	n-line	n-chann	status	line-cfg	chann-cfg																																					
00	0	1	2	0001	6aef7c	6aef90																																					
ID	line#	board-id	n-chann	chann-cfg																																							
00	1	00	2	6aef90																																							
ID	chann#	line-id	board-id	address	name																																						
00	1	00	00	5c9020	enet0																																						
01	2	00	00	5c950c	enet1																																						

## 1.89 ether driver cnt disp

**Description** Use this command to display the ether driver/statistics on the Ethernet driver.

**Command Syntax** *ether driver cnt disp <channel name>*

**Parameters**

Name	Description
channel name	Input the driver's channel name (enet0,enet1,...)

Below are the informations shown by the command:

**Output field description**

ChanID	MACTxPaused	BDMATxErr
Cntptr	MACTxDefer	BDMATxCp
BDMARxInt	MACTxNoCarr	BDMATxNLErr
BDMATxInt	MACTxSQE	BDMATxNotErr
MACRxInt	MACTxLateColl	BDMATxEmpty
MACTxInt	MACTxPar	BDMATxCmp
MACRxClRecd	MACTxHalted	RxPktCnt
MACRx10Stat	MACTxUnder	TxPktCnt
MACRxAlignErr	MACTxErr	MACRxNothing
MACRxCRCErr	MACTxCmp	RxNoBufCnt
MACRxOverFlowErr	BDMARxErr	TxSignalCnt
MACRxLongErr	BDMARxEarly	TxBufFullCnt
MACRxParErr	BDMARxNIErr	Bug1
MACRxHalted	BDMARxNotErr	Bug2
MACRxGood	BDMARxMsoErr	Bug3
MACRxErr	BDMARxEmptyErr	Bug4
MACTxExcColl	BDMARxFifoOvr	MACTXColl
MACTxDefered	BDMARxFail	

## 1.90 ether driver status

---

**Description** Use this command to display LAN Status

**Command Syntax** *ether driver status <channel name>*

**Parameters**

Name	Description
channel name	Input the driver's channel name (enet0,enet1,...)

Below are the information shown by the command:

**Output field description**

ChanID	Mac
Eq	dq
DevType	DevFlag
ifaceType	TxSending
mac_p	ec_p
IntPend	IntMask
TxFramStart	RxFramStart
TxFramCur	RxFramCur
TxFramIn	RxFramIn
TxFramOut	RxFramOut
LinkSt	CacheQueue
pastRxIntCnt	guardTimer
MbufCacheAlloc	MbufCacheEmpty

## 1.91 ether driver config

---

**Description** Use this command to set the Ethernet driver configuration

**Command Syntax** *ether driver config <parameters>*

**Parameters**

Parameters	Description
Auto/Normal	0=auto sence 1=normal
10/100	0=10Mbps 1=100Mbps
Half/Full Dup	0=half duplex 1=full duplex
Ch-name	Channel name.

## 1.92 *ether version*

---

<b>Description</b>	Use this command to display the ethernet driver version
--------------------	---

<b>Command Syntax</b>	<i>ether version</i>
-----------------------	----------------------

### 1.93 show wan node

---

**Description** Use this command to show the status of wan in specific remote node.

**Command Syntax** *show wan node <vc\_index:0~7>*

**Parameters**

Name	Description
vc_index:0~7	Input the number of remote node

**Output field description**

```
sys> show wan node 0
RemoteNode    = 0
Rem Node Name = 1(ISP)
Encapsulation = RFC 1483
Multiplexing  = LLC-based
Channel active = Yes
VPI/VCI value = 0/33
IP Routing mode= No
Bridge mode   = Yes
Remote IP Addr    = 0.0.0.0
Remote IP Subnet Mask = 0.0.0.0
IP address assignment type = Dynamic
SUA             = No
Multicast        = None
```



## 1.94 show wan adsl

**Description** Use this command to show the configuration and setting that related to the adsl.

**Command Syntax** *show wan adsl <command>*

Parameters	Command	
	Command	Description
	chandata	show the channel data information
	close	close the adsl connection
	coding	show the adsl line coding information
	defbitmap	show the adsl defect bit map table
	linedata	show the adsl linedata information
	open	open the adsl connection
	opencmd	show the adsl connection type
	opmode	show the adsl operational mode
	perfdata	show adsl performance data
	reset	reset the adsl connection
	status	show current adsl connection status
	version	show the adsl version
	vendorid	show adsl vendorid configuration
	utopia	show the adsl utopia parameters
	nearituid	show adsl near end itu identification
	farituid	show adsl near end itu identification
	cellcnt	show adsl cell counter
	defectcheck	show adsl defect check configuration
	txgain	show adsl transmission gain
	targetnoise	show adsl target noise margin
	txfilter	show adsl transmission filter
	setrvid	show adsl near-end vendor id
	txtones	show adsl transmission start/stop tone
	snroffset	show adsl snr offset
	errorsecond	show adsl error second information
	diag	show adsl connection diagnostic
	watchdog	show adsl dsp watchdog status
	fwversion	show adsl firmware version
	uptime	show adsl connection uptime

## 1.95 *show lan*

---

<b>Description</b>	Use this command to show the lan configuration status
<b>Command Syntax</b>	<i>show lan</i>
<b>Output field description</b>	<pre>sys&gt;show lan DHCP setting:   DHCP Mode   = None TCP/IP Setup:   IP Address   = 192.168.1.1   IP Subnet Mask = 255.255.255.0   Rip Direction = Both   Version      = Rip-2B   Multicast    = IGMP-v2</pre>

## 1.96 *show community*

---

<b>Description</b>	Use this command to show the community/SNMP configuration status
<b>Command Syntax</b>	<i>show community</i>
<b>Output field description</b>	<pre>sys&gt;show community SNMP Configuration: Get Community = public Set Community = public Trusted Host = 0.0.0.0 Trap: Community = public Destination = 0.0.0.0</pre>

## 1.97 show channel display

**Description** Use this command to show the channel status, configuration and counter.

**Command Syntax** *show channel display <parameters>*

**Parameters**

Parameters	Description
[vc_index]	Input vc / remote node number (mpoa)

**Output field description**

```
sys>show channel display 1
----- CHANNEL mpoa01 -----
State: N/A
inPkt =      0, inDiscard =      0, inError =      0
inDrop =      0, inOctet  =      0, inUCast =      0
inMCast =      0
outPkt =      0, outDiscard =      0, outError =      0
outOctet=      0, outUCast  =      0, outMCast =      0
```

## 1.98 show channel clear

**Description** Use this command to show the channel status, configuration and clear the counter.

**Command Syntax** *show channel clear <parameters>*

**Parameters**

Parameters	Description
[vc_index]	Input vc / remote node number (mpoa)

**Output field description**

```
sys>show channel clear 1
----- CHANNEL mpoa01 -----
State: N/A
inPkt =      0, inDiscard =      0, inError =      0
inDrop =      0, inOctet  =      0, inUCast =      0
inMCast =      0
outPkt =      0, outDiscard =      0, outError =      0
outOctet=      0, outUCast  =      0, outMCast =      0
```

## 1.99 show all

---

<b>Description</b>	Use this command to show all information about the system
<b>Command Syntax</b>	<i>show all</i>
<b>Output field description</b>	<pre>sys&gt;show all RemoteNode   = 0 Rem Node Name = 1(ISP) Encapsulation = RFC 1483 Multiplexing  = LLC-based Channel active = Yes VPI/VCI value = 0/33 IP Routing mode= No Bridge mode   = Yes Remote IP Addr   = 0.0.0.0 Remote IP Subnet Mask = 0.0.0.0 IP address assignment type = Dynamic SUA           = No Multicast      = None  RemoteNode   = 1 Rem Node Name = node1 Encapsulation = RFC 1483 Multiplexing  = LLC-based Channel active = Yes VPI/VCI value = 8/35 IP Routing mode= No Bridge mode   = Yes Remote IP Addr   = 0.0.0.0 Remote IP Subnet Mask = 0.0.0.0 IP address assignment type = Dynamic SUA           = No Multicast      = IGMP-v2  RemoteNode   = 2 &lt;empty&gt; RemoteNode   = 3 &lt;empty&gt; RemoteNode   = 4 &lt;empty&gt; RemoteNode   = 5 &lt;empty&gt; RemoteNode   = 6 &lt;empty&gt; RemoteNode   = 7 &lt;empty&gt;</pre>

## 1.100 set cpe

---

**Description** Use this command to set the configuration related to the sytem

**Command Syntax**

*set cpe <command>*

**Parameters**

Command	Description
Hosname	Set the system hostname
Message	Set the router cpe message
Iproute	switch the cpe router in ip mode (on/off)
bridge	switch the cpe router in bridge mode (on/off)

## 1.101 set wan

**Description** Use this command to set the configuration related to the wan connection

**Command Syntax** *set wan <command>*

Parameters	Command		Description
	Help		Display the help contents
	node		Set wan remote node configuration
	clear		Clear or delete a remote node
	enable		Enable a specific remote node
	disable		Disable a specific remote node
	encap		Set remote node's encapsulation
	mux		Set remote node's multiplexing
	vpi		Set remote node's vpi value
	vci		Set remote node's vci value
	wanip		Set remote node's wan ip (static/dynamic)
	remoteip		Set wan remote ip
	bridge		Set remote node to bridge mode
	iproute		Set remote node to ip route mode
	sua		Set wan sua (on/off)
	rip		Set wan rip mode
	multicast		Set wan multicast mode
	ppp		Username : set wan ppp username Password : set wan ppp password Auth : set wan ppp authentic <chap pap both>
	save		save wan configuration setting
	exit		exit wan configuration setting without saving



## 1.102 set wan adsl

**Description** Use this command to set the configuration and setting that related to the adsl.

**Command Syntax** *et wan adsl <command>*

Parameters	Command	
	Command	Description
	chandata	set the channel data information
	close	close the adsl connection
	coding	set the adsl line coding information
	defbitmap	set the adsl defect bit map table
	linedata	set the adsl linedata information
	open	open the adsl connection
	opencmd	set the adsl connection type
	opmode	set the adsl operational mode
	perfdata	set adsl performance data
	reset	reset the adsl connection
	status	set current adsl connection status
	version	set the adsl version
	vendorid	set adsl vendorid configuration
	utopia	set the adsl utopia parameters
	nearituid	set adsl near end itu identification
	farituid	set adsl near end itu identification
	cellcnt	set adsl cell counter
	defectcheck	set adsl defect check configuration
	txgain	set adsl transmission gain
	targetnoise	set adsl target noise margin
	txfilter	set adsl transmission filter
	setrvid	set adsl near-end vendor id
	txtones	set adsl transmission start/stop tone
	snroffset	set adsl snr offset
	errorsecond	set adsl error second information
	diag	set adsl connection diagnostic
	watchdog	set adsl dsp watchdog status
	fwversion	set adsl firmware version
	uptime	set adsl connection uptime

**1.103 set lan**

<b>Description</b>	Use this command to set the IP configuration
--------------------	--

**Command Syntax**    *set lan<command>*

Parameters	Command	Description
	ipaddr	set lan IP address
		set lan ipaddr <ipaddr> <subnet mask>
	rip	set RIP mode
		set lan rip <none both inonly outonly>
		<rip1 rip2b rip2m>
	multicast	set lan multicast mode
		set lan multicast <none igmpv1 igmpv2>
	dhcp	set lan dhcp feature
		set lan dhcp <none server relay>
	relayipaddr	set lan relay IP address
		set lan relayipaddr <ipaddr>
	dhcppool	set lan ip dhcp and pool value
		set lan dhcppool <ipaddr> <num>
	dhcpleasetime	set lan dhcp lease time
		set lan dhcpleasetime <period:seconds>
	dhcpcdns	set dns on dhcp feature
		set lan dhcpcdns <dns1> <dns2>

### 1.104 set community

---

**Description** Use this command to set the SNMP configuration

**Command Syntax** *set community <parameters>*

**Parameters**

Parameters	Description
Get_Comm	Community string of SNMP GET_Request
Set_Comm	Community string of SNMP SET_Request
Trusted_Host	IP Address of Trusted_Host. "0.0.0.0" for every host.
Trap_Comm	Community string of SNMP Trap_Indication
Trap_Dest	IP Address of Trap Destination Host.

### 1.105 *set baudrate*

---

**Description**     Use this command to set the router's baudrate

**Command Syntax**     *set baudrate <parameters>*

Parameters	Parameters
	9600k 19200k 38400k 57600k 115200k

### **1.106 set reboot**

---

<b>Description</b>	Use this command to reset the system
--------------------	--------------------------------------

<b>Command Syntax</b>	<i>set reboot</i>
-----------------------	-------------------

### **1.107 etherdbg print**

---

<b>Description</b>	Use this command to open or close the Ethernet debug messages.
--------------------	--

<b>Command Syntax</b>	<i>set etherdbg print</i>
-----------------------	---------------------------

<b>Parameters</b>	
-------------------	--

### **1.108 *usb version***

---

<b>Description</b>	Use this command to display the usb support version
<b>Command Syntax</b>	<i>usb version</i>
<b>Output field description</b>	sys>usb version USB VERSION : 1.1

### **1.109 *usb address***

---

<b>Description</b>	Use this command to display the usb device address
--------------------	--

<b>Command Syntax</b>	<i>usb address</i>
-----------------------	--------------------



### 1.110 *usb config*

---

<b>Description</b>	Use this command to display the usb configuration
<b>Command Syntax</b>	<i>usb config</i>
<b>Output field description</b>	<pre>sys&gt;usb config ----- USB Config Status ----- USB Chan ID Num      =  2 USB Chan Name        = enet2 USB Vendor ID        = 45e USB Product ID       = 930a</pre>

### 1.111 *usb cnt display*

---

<b>Description</b>	Use this command to display the usb endpoint counter
--------------------	--

<b>Command Syntax</b>	<i>usb cnt display</i>
-----------------------	------------------------

<b>Output field description</b>	<pre>sys&gt;usb cnt display ----- DISPLAY USB ENDPOINT COUNT ----- EP0 Tx    =    0,    EP0 TxErr   =    0 EP0 Rx    =    0,    EP0 RxErr   =    0 EP1 Tx    =    0,    EP1 TxErr   =    0 EP1 Rx    =    0,    EP1 RxErr   =    0 EP2 Tx    =    0,    EP2 TxErr   =    0 EP3 Tx    =    0,    EP3 TxErr   =    0 EP3 Rx    =    0,    EP3 RxErr   =    0</pre>
---------------------------------	--

### 1.112 *usb cnt clear*

---

<b>Description</b>	Use this command to clear the usb endpoint counter
--------------------	--

<b>Command Syntax</b>	<i>usb cnt clear</i>
-----------------------	----------------------

### 1.113 *usb debug*

---

**Description** Use this command to enable or disable the debug message

**Command Syntax** *usb debug <parameters>*

**Parameters**

Name	Description
1	Enable
0	Disable

### 1.114 *usb reset*

---

<b>Description</b>	Use this command to reset the USB connection
--------------------	--

<b>Command Syntax</b>	<i>usb reset</i>
-----------------------	------------------

### 1.115 wan hwsar clear

---

<b>Description</b>	Use this command to clear the SAR driver counters.
<b>Command Syntax</b>	<i>wan hwsar clear</i>
<b>Output field description</b>	<pre>sys&gt;wan hwsar clear [ SAR Counters ] inPkts      = 0x00000000, inDiscards = 0x00000000 inF4Pkts    = 0x00000000, inF5Pkts  = 0x00000000 inDMATaskEnd = 0x00000000, inBufErr   = 0x00000000 inCrcErr    = 0x00000000 outPkts     = 0x00000000, outDiscards = 0x00000000 outF4Pkts   = 0x00000000, outF5Pkts  = 0x00000000 softRstCnt  = 0x00000000</pre>

### 1.116 wan hwsar disp

---

<b>Description</b>	Use this command to display the SAR driver counters.
<b>Command Syntax</b>	<i>wan hwsar disp</i>
<b>Output field description</b>	<pre>sys&gt;wan hwsar disp [ SAR Counters ] inPkts      = 0x00000000, inDiscards = 0x00000000 inF4Pkts    = 0x00000000, inF5Pkts  = 0x00000000 inDMATaskEnd = 0x00000000, inBufErr   = 0x00000000 inCrcErr    = 0x00000000 outPkts     = 0x00000000, outDiscards = 0x00000000 outF4Pkts   = 0x00000000, outF5Pkts  = 0x00000000 softRstCnt  = 0x00000000</pre>

### 1.117 wan hwsar sendoam

---

**Description** Use this command to send oam cell

**Command Syntax** *wan hwsar sendoam*

**Output field description** sys>wan hwsar sendoam  
Usage: <vpi> <vci> <f5> <end-to-end> <type:0(AIS) 1(RDI)  
2(LoopBack)>



### 1.118 wan adsl chandata

---

**Description** Some useful information about your connection can then be viewed. Use this command to display the adsl channel data or line rate to determine if you're on fast channel or interleave channel mode.

**Command Syntax** *wan adsl chandata*

**Output field description**

```
sys>wan adsl chandata
near-end interleaved channel bit rate: 0 kbps
near-end fast channel bit rate: 1536 kbps
far-end interleaved channel bit rate: 0 kbps
far-end fast channel bit rate: 512 kbps
```

### **1.119 wan adsl close**

---

<b>Description</b>	User can disconnect the adsl connection through CI command. Use this command to close or interrupt adsl connection.
<b>Command Syntax</b>	<i>wan adsl close</i>
<b>Output field description</b>	sys>wan adsl close Ok

### **1.120 wan adsl opmode**

---

<b>Description</b>	Use this command to display adsl mode standard (operational mode) your Router is using.
<b>Command Syntax</b>	<i>wan adsl opmode</i>
<b>Output field description</b>	sys>wan adsl opmode operational mode: ITU G.992.1(G.DMT)

## 1.121 wan adsl linedata

---

**Description** Type wan adsl line far or wan adsl line near to get your upstream or downstream line noise margin and attenuation.

**Command Syntax** *wan adsl linedata [far|near]*

**Parameters**

Name	Description
far	Show adsl far-end linedata (carrier load)
near	Show adsl near-end linedata (noise margin)

**Output field description**

sys>wan adsl linedata far  
carrier load: number of bits per symbol(tone)  
00 00 00 00 00 00 00 ..... ..

sys>wan adsl linedata near  
noise margin downstream: 30.0 db  
noise margin upstream: 26.0 dbm

### 1.122 wan adsl open

---

<b>Description</b>	Use this command to open the adsl connection
<b>Command Syntax</b>	<i>wan adsl open</i>
<b>Output field description</b>	sys>wan adsl open ok

### 1.123 wan adsl opencmd

---

<b>Description</b>	Use this command to set mode of adsl operation. After changing the connection mode, the adsl must be reset by typing wan adsl reset.
<b>Command Syntax</b>	<i>wan adsl opencmd [gdmr glite t1.413 multimode]</i>
<b>Output field description</b>	sys>wan adsl opmode operational mode: G_DMT sys>wan adsl opencmd glite sys>wan adsl reset sys>wan adsl opmode operational mode: G_Lite

### **1.124 wan adsl coding**

---

<b>Description</b>	Use this command to display current adsl line coding.
<b>Command Syntax</b>	<i>wan adsl coding</i>
<b>Output field description</b>	sys>wan adsl coding line coding: DMT

## 1.125 wan adsl defbitmap

---

**Description** Use this command to show adsl defects bitmaps status.

**Command Syntax** *wan adsl defbitmap*

**Output field description** sys>wan adsl defbitmap  
current near-end defects bitmaps:  
Los :0  
Lof :0  
Lop :0  
LcdNonInterleaved:0  
LcdInterleaved :0  
Lom :0  
current far-end defects bitmaps:  
Los :0  
Lof :0  
Lop :0  
LcdNonInterleaved:0  
LcdInterleaved :0  
Lom :0  
current near-end defects bitmaps changed:  
Los :0  
Lof :0  
Lop :0  
LcdNonInterleaved:0  
LcdInterleaved :0  
Lom :0  
current far-end defects bitmaps changed:  
Los :0  
Lof :0  
Lop :0  
LcdNonInterleaved:0  
LcdInterleaved :0  
Lom :0



### 1.126 wan adsl opmode

---

<b>Description</b>	Use this command to display adsl mode standard (operational mode) your modem is using.
<b>Command Syntax</b>	<i>wan adsl opmode</i>
<b>Output field description</b>	sys>wan adsl opmode operational mode: ITU G.992.1(G.DMT)

### 1.127 wan adsl perfdata

---

<b>Description</b>	Use this command to display details of adsl line statistics or adsl performance data.
--------------------	---

<b>Command Syntax</b>	<i>wan adsl perfdata</i>
-----------------------	--------------------------

<b>Output field description</b>	<pre>sys&gt;wan adsl perfdata near-end FEC error fast: 0 near-end FEC error interleaved: 0 near-end CRC error fast: 1 near-end CRC error interleaved: 0 near-end HEC error fast: 0 near-end HEC error interleaved: 0 far-end FEC error fast: 0 far-end FEC error interleaved: 0 far-end CRC error fast: 0 far-end CRC error interleaved: 0 far-end HEC error fast: 0 far-end HEC error interleaved: 0 Error second in 15min      : 0 Error second in 24hr       : 0 Error second after power-up : 0 ADSL uptime    0:02:13</pre>
---------------------------------	--

## 1.128 wan adsl reset

---

**Description** Use this command to reset the adsl connection.

**Command Syntax** *wan adsl reset*

### 1.129 wan adsl status

---

<b>Description</b>	Use this command to check and display current adsl line status
<b>Command Syntax</b>	<i>wan adsl status</i>
<b>Output field description</b>	sys>wan adsl status current modem status: up

### 1.130 wan adsl version

---

<b>Description</b>	Use this command to show the adsl version.
<b>Command Syntax</b>	<i>wan adsl version</i>
<b>Output field description</b>	sys>wan adsl version near-end version: 1 far-end version: 0

### 1.131 wan adsl vendorid

---

<b>Description</b>	Use this command to show adsl chipset vendor id.
--------------------	--

<b>Command Syntax</b>	<i>wan adsl vendorid</i>
-----------------------	--------------------------

<b>Output field description</b>	sys>wan adsl vendorid near-end vendorid: 22bb far-end vendorid: 0
---------------------------------	---

### 1.132 wan adsl utopia

---

<b>Description</b>	Use this command to show adsl utopia interface information.
--------------------	---

<b>Command Syntax</b>
-----------------------

	<i>wan adsl utopia</i>
--	------------------------

<b>Output field description</b>
---------------------------------

	sys>wan adsl utopia UTOPIA parameters: level: 1 fast address: 0 interleaved address: 1
--	--

### 1.133 wan adsl nearituid

---

<b>Description</b>	Use this command to show adsl G.DMT/G.lite near-end ITU id.
--------------------	---

<b>Command Syntax</b>
-----------------------

<i>wan adsl nearituid</i>
---------------------------

<b>Output field description</b>
---------------------------------

sys>wan adsl nearituid near end itu identification: 0 0 54 43 54 4e 0 0
--



### **1.134 wan adsl farituid**

---

<b>Description</b>	Use this command to show adsl G.DMT/G.lite far-end ITU id.
--------------------	--

<b>Command Syntax</b>
-----------------------

<i>wan adsl farituid</i>
--------------------------

<b>Output field description</b>
---------------------------------

sys>wan adsl farituid far end itu identification: f 0 41 4c 43 42 0 0
--

### 1.135 wan adsl farituid

---

<b>Description</b>	Use this command to show adsl G.DMT/G.lite far-end ITU id.
--------------------	--

<b>Command Syntax</b>
-----------------------

<i>wan adsl farituid</i>
--------------------------

<b>Output field description</b>
---------------------------------

sys>wan adsl farituid far end itu identification: f 0 41 4c 43 42 0 0
--

### 1.136 wan adsl cellcnt

---

<b>Description</b>	Use this command to show the cell counter information
--------------------	---

<b>Command Syntax</b>	<i>wan adsl cellcnt</i>
-----------------------	-------------------------

<b>Output field description</b>	sys>wan adsl cellcnt ActiveRxCellsFast = 0 ActiveRxCellsInterleaved = 240 ActiveTxCellsFast = 0 ActiveTxCellsInterleaved = 472
---------------------------------	--

### **1.137 wan adsl defectcheck**

---

<b>Description</b>	Use this command to set turn on/off the adsl defect check
<b>Command Syntax</b>	<i>wan adsl defectcheck</i>
<b>Output field description</b>	sys>wan adsl defectcheck [on off]

### 1.138 wan adsl txgain

---

<b>Description</b>	Use this command to set adsl transmission gain
<b>Command Syntax</b>	<i>wan adsl txgain</i>
<b>Output field description</b>	sys>wan adsl txgain usage: gain value should be >= 0x0c or <= 0x00 (-12~0dB) current value:2

### 1.139 wan adsl targetnoise

---

**Description** Use this command to set adsl transmission target noise margin.

**Command Syntax** *wan adsl targetnoise*

**Output field description**  
sys>wan adsl targetnoise  
usage: gain value should be snr margin(dB) \* 512  
current value:900

### 1.140 wan adsl txfilter

---

<b>Description</b>	Use this command to set adsl transmission filter.
<b>Command Syntax</b>	<i>wan adsl txfilter</i>
<b>Output field description</b>	sys>wan adsl txfilter usage: tx_filter_type current value:31

### **1.141 wan adsl setrvid**

---

**Description**      Use this command to set adsl near-end ITU id.

**Command Syntax**      *wan adsl setrvid*

**Output field description**      sys>wan adsl setrvid  
usage: 0=trendchip 1=alcatel 2=gspn 3=ti 4=adi 5=infineon



### 1.142 wan adsl txtones

---

**Description** Use this command to set adsl transmission start/stop tone number.

**Command Syntax** *wan adsl txtones*

**Output field description**

sys>wan adsl txtones  
usage: <start tone> <end tone> tone=0x6~0x1F  
current value: start\_tone=6 end\_tone=1d

### 1.143 wan adsl snroffset

---

<b>Description</b>	Use this command to set adsl snr offset.
<b>Command Syntax</b>	<i>wan adsl snroffset</i>
<b>Output field description</b>	sys>wan adsl txtones usage: set snr offset (offset(db)*512) current value:ffff200

### 1.144 wan adsl errorsecond

---

**Description** Use this command to set when there are many error second, the adsl will be reseted or not.

**Command Syntax** *wan adsl errorsecond*

**Parameters**

Name	Description
switch	Enable/disable error second shutdown adsl connection
shutdown	Show adsl shutdown counter caused by error seconds

**Output field description**

sys>wan adsl shutdown  
Time to shutdown by error second <0:disable>: 0

## 1.145 wan adsl diag

---

**Description** Use this command to show the features related to the system and adsl connection on wan interface. This command displays the information that includes sys date, version, ip arp status, firmware version, opmode, status, dmt rates etc. For the complete reference please refer to the below description.

**Command Syntax** *wan adsl diag*

**Output field description**

```
sys> wan adsl diag
sys version => ...
sys date => ...
sys time => ...
sys cpu disp => ...
ip arp status => ...
wan adsl fwversion => ...
wan dmt tr 0 => ...
wan adsl c => ...
wan adsl p => ...
wan adsl opmode => ...
wan adsl status => ...
wan adsl nearituid => ...
wan adsl farituid => ...
wan adsl l n => ...
wan adsl l f => ...
wan dmt rates1 => ...
wan dmt msg1 => ...
wan dmt rates_ra => ...
wan dmt msg_ra => ...
wan dmt rates2 => ...
wan dmt msg2 => ...
wan dmt afe paracfg 72 1 => ...
wan dmt show mederrp => ...
wan dmt initbng => ...
wan dmt bng => ...
wan dmt show snr => ...
wan dmt aoc dump => ...
wan dmt show pilotinput => ...
wan dmt cell => ...
wan hwsar disp => ...
wan dmt db disp => ...
wan dmt db get => ...
wan dmt parse 48 => ...
wan dmt parse 4f => ...
wan dmt parse 50 => ...
wan dmt tlog 77 1 => ...
wan dmt set retrainmethod => ...
wan dmt set highrate => ...
wan dmt set pllkpki => ...
wan dmt set cbngrelink => ...
wan dmt set retrainmedley => ...
wan dmt set ibinsert => ...
wan dmt set medleypatchk => ...
```

wan dmt set pilotdata => ...  
wan dmt set rmsgrabmax => ...  
sys memrl b4000000 => ...  
sys memrl b4000008 => ...  
sys memrl b400080c => ...  
wan adsl p => ...  
sys view autoexec.net => ...

### 1.146 wan adsl watchdog

---

**Description** Use this command to display the current firmware version.

**Command Syntax** *wan adsl watchdog*

Parameters	Name	Description
	0	Enable adsl watchdog to prevent abnormal condition
	1	Disable adsl watchdog to prevent abnormal condition

**Output field description** sys>wan adsl watchdog  
adsl dsp watchdog: 1

### **1.147 wan adsl fwversion**

---

<b>Description</b>	Use this command to display the current firmware version.
<b>Command Syntax</b>	<i>wan adsl fwversion</i>
<b>Output field description</b>	sys>wan adsl fwversion ADSL FwVersion is = ...

### **1.148 wan adsl uptime**

---

<b>Description</b>	Use this command to display the adsl uptime information
--------------------	---

<b>Command Syntax</b>	<i>wan adsl uptime</i>
-----------------------	------------------------

<b>Output field description</b>	sys>wan adsl uptime ADSL uptime 0:04:59
---------------------------------	--



## 1.149 wlan essid

**Description** The Extended Service Set ID (ESSID) is the name of the network you wish to build. It is used to identify different wireless networks. Use this command to set the name of network. The configuration needs to be saved by typing wlan save; otherwise the ESSID name will only be stored in a temporary status. By using wlan display we can ensure whether the configuration takes effect.

**Command Syntax** `wlan essid <parameters>`

### Parameters

Name	Description
ESSID name	Network name wish to build

### Output field description

```
sys>wlan essid 1234
sys>wlan save
sys>wlan display
essid          = 1234
chid           = 3
hide essid     = No
RTS threshold  = 0
Frag threshold = 2432
WEP key type   = none
WEP default key = 0
MAC filter active = 0
MAC filter action = Allow
index  MAC address  index  MAC address
-----
1  00:00:00:00:00:00  17  00:00:00:00:00:00
2  00:00:00:00:00:00  18  00:00:00:00:00:00
3  00:00:00:00:00:00  19  00:00:00:00:00:00
4  00:00:00:00:00:00  20  00:00:00:00:00:00
5  00:00:00:00:00:00  21  00:00:00:00:00:00
6  00:00:00:00:00:00  22  00:00:00:00:00:00
7  00:00:00:00:00:00  23  00:00:00:00:00:00
8  00:00:00:00:00:00  24  00:00:00:00:00:00
9  00:00:00:00:00:00  25  00:00:00:00:00:00
10 00:00:00:00:00:00  26  00:00:00:00:00:00
11 00:00:00:00:00:00  27  00:00:00:00:00:00
12 00:00:00:00:00:00  28  00:00:00:00:00:00
13 00:00:00:00:00:00  29  00:00:00:00:00:00
14 00:00:00:00:00:00  30  00:00:00:00:00:00
15 00:00:00:00:00:00  31  00:00:00:00:00:00
16 00:00:00:00:00:00  32  00:00:00:00:00:00
```

### 1.150 wlan chid

**Description** Use this command to set the channel configuration. The configuration also needs to be saved by typing wlan save; otherwise the ESSID name will only be stored in a temporary status. By using wlan display we can ensure whether the configuration takes effect.

**Command Syntax** wlan chid n

**Parameters**

Name	Description
n	Number of channel id

**Output field description**

```
sys>wlan chid 3
sys>wlan save
sys>wlan display
essid          = 1234
chid           = 3
hide essid     = No
RTS threshold  = 0
Frag threshold = 2432
WEP key type   = none
WEP default key = 0
MAC filter active = 0
MAC filter action = Allow
index  MAC address  index  MAC address
-----
1  00:00:00:00:00:00  17  00:00:00:00:00:00
2  00:00:00:00:00:00  18  00:00:00:00:00:00
3  00:00:00:00:00:00  19  00:00:00:00:00:00
4  00:00:00:00:00:00  20  00:00:00:00:00:00
5  00:00:00:00:00:00  21  00:00:00:00:00:00
6  00:00:00:00:00:00  22  00:00:00:00:00:00
7  00:00:00:00:00:00  23  00:00:00:00:00:00
8  00:00:00:00:00:00  24  00:00:00:00:00:00
9  00:00:00:00:00:00  25  00:00:00:00:00:00
10 00:00:00:00:00:00  26  00:00:00:00:00:00
11 00:00:00:00:00:00  27  00:00:00:00:00:00
12 00:00:00:00:00:00  28  00:00:00:00:00:00
13 00:00:00:00:00:00  29  00:00:00:00:00:00
14 00:00:00:00:00:00  30  00:00:00:00:00:00
15 00:00:00:00:00:00  31  00:00:00:00:00:00
16 00:00:00:00:00:00  32  00:00:00:00:00:00
```

## 1.151 wlan display

---

**Description** Use this command to show wlan configuration setting including ESSID and channel ID.

**Command Syntax** *wlan display*

### Output field description

```
sys>wlan display
ssid          = 1234
chid          = 3
hide ssid     = No
RTS threshold = 0
Frag threshold = 2432
WEP key type  = none
WEP default key = 0
MAC filter active = 0
MAC filter action = Allow
index  MAC address  index  MAC address
-----
1  00:00:00:00:00:00  17  00:00:00:00:00:00
2  00:00:00:00:00:00  18  00:00:00:00:00:00
3  00:00:00:00:00:00  19  00:00:00:00:00:00
4  00:00:00:00:00:00  20  00:00:00:00:00:00
5  00:00:00:00:00:00  21  00:00:00:00:00:00
6  00:00:00:00:00:00  22  00:00:00:00:00:00
7  00:00:00:00:00:00  23  00:00:00:00:00:00
8  00:00:00:00:00:00  24  00:00:00:00:00:00
9  00:00:00:00:00:00  25  00:00:00:00:00:00
10 00:00:00:00:00:00  26  00:00:00:00:00:00
11 00:00:00:00:00:00  27  00:00:00:00:00:00
12 00:00:00:00:00:00  28  00:00:00:00:00:00
13 00:00:00:00:00:00  29  00:00:00:00:00:00
14 00:00:00:00:00:00  30  00:00:00:00:00:00
15 00:00:00:00:00:00  31  00:00:00:00:00:00
16 00:00:00:00:00:00  32  00:00:00:00:00:00
```

### **1.152 wlan load**

---

<b>Description</b>	Use this command to load the configuration from the last saving session.
<b>Command Syntax</b>	<i>wlan load</i>

### 1.153 *wlan save*

---

<b>Description</b>	Use this command to save the configuration and use wlan display to check if the configuration saved takes effect.
--------------------	---

<b>Command Syntax</b>	<i>wlan save</i>
-----------------------	------------------

## 1.154 wlan clear

---

<b>Description</b>	Use this command to reset the configuration. When the command is typed, the current configuration will be reset to zero.
<b>Command Syntax</b>	<i>wlan clear</i>
<b>Output field description</b>	<pre>sys&gt;wlan clear sys&gt;wlan display ssid                = chid                = 0 hide ssid           = No RTS threshold       = 0 Frag threshold      = 0 WEP key type        = none WEP default key     = 0 MAC filter active    = 0 MAC filter action    = Allow index  MAC address  index  MAC address ----- 1  00:00:00:00:00:00  17  00:00:00:00:00:00 2  00:00:00:00:00:00  18  00:00:00:00:00:00 3  00:00:00:00:00:00  19  00:00:00:00:00:00 4  00:00:00:00:00:00  20  00:00:00:00:00:00 5  00:00:00:00:00:00  21  00:00:00:00:00:00 6  00:00:00:00:00:00  22  00:00:00:00:00:00 7  00:00:00:00:00:00  23  00:00:00:00:00:00 8  00:00:00:00:00:00  24  00:00:00:00:00:00 9  00:00:00:00:00:00  25  00:00:00:00:00:00 10 00:00:00:00:00:00  26  00:00:00:00:00:00 11 00:00:00:00:00:00  27  00:00:00:00:00:00 12 00:00:00:00:00:00  28  00:00:00:00:00:00 13 00:00:00:00:00:00  29  00:00:00:00:00:00 14 00:00:00:00:00:00  30  00:00:00:00:00:00 15 00:00:00:00:00:00  31  00:00:00:00:00:00 16 00:00:00:00:00:00  32  00:00:00:00:00:00</pre>

### 1.155 wlan filter

---

**Description** Use this command to activate the filter set feature on WLAN.

**Command Syntax** *wlan filter <parameters>*

**Parameters**

Name	Description
<incoming outgoing>	Set to filter incoming or outgoing packets
<generic>	Use the generic filter mode
[set#1]	Use filter set 1
[set#2]	Use filter set 2
[set#3]	Use filter set 3
[set#4]	Use filter set 4

**Output field description** sys>wlan filter

### 1.156 wlan debug

---

**Description** Use this command to set the debug parameter in order to show the debug error message.

**Command Syntax** *wlan debug <parameters>*

Parameters	Name	Description
	0	Turn off the debug error message
	1	Turn on and display the debug error message



### 1.157 wlan version

---

<b>Description</b>	Use this command to show the firmware version.
--------------------	--

<b>Command Syntax</b>	<i>wlan version</i>
-----------------------	---------------------

<b>Output field description</b>	sys>wlan version Intersil primary firmware version: 0.8.3 Intersil secondary firmware version: 0.8.3 Intersil AP firmware version: 1.2.1
---------------------------------	---

### **1.158 wlan reset**

---

<b>Description</b>	Use this command to reset the WLAN
<b>Command Syntax</b>	<i>wlan reset</i>

### 1.159 wlan association

---

**Description** Use this command to show the list of clients join this service.

**Command Syntax** *wlan associaton*

**Output field description**

```
sys>wlan association
[ NUM]   MAC Address      Association time
-----
[001]    00:02:A3:12:34:45  20:00:17  2003/06/25  1
-----
Total: 1
```

### 1.160 wlan scan

---

**Description** Use this command to scan for the available channel on the network. This command also recommend available channel in the network.

**Command Syntax** *wlan scan*

**Output field description** sys>wlan scan

Channel	Activity	Count	Signal
1	0	2	45
2	1	4	46
3	1	5	55
4	1	4	46
5	0	1	44
6	1	4	52
7	1	5	55
8	0	3	52
9	1	5	53
10	0	3	47
11	1	5	48

Recommend Channel : 5

### 1.161 wlan channel

---

**Description** Use this command to set or control the WLAN channel data

**Command Syntax** *wlan channel <parameters>*

**Parameters**

Name	Description
On	Open WLAN data TX/RX
Off	Close WLAN data TX/RX